

immature fish, as the specimen now under notice is not more than three feet in length. It is also to be noted that the pectoral fins are silvery, and the anal and broken caudal fins silvery tinged with red; that the first ray of the dorsal fin, apparently complete, is acutely pointed, $5\frac{1}{2}$ inches in length, and but very slightly curved backward; and that the pupil of the eye is not round but oval longitudinally, as shown in the figures of *L. fiski*, Gthr. (Proc. Zool. Soc. 1890, pls. xix., xx.), but with a slight downward inclination anteriorly. The minute ventral fins are distinctly five-rayed. The depth of the body not far from the head is five inches and three-quarters, but its stoutest part in the same place, along the dorsal line, is rather less than half an inch in thickness.

Dr. Günther (*loc. cit.* p. 245) suggests that *L. capellei*, Schleg., and *L. cristatus*, Johns., may possibly be conspecific with *L. cepedianus*, and in that case the latter would be recorded as having occurred in the Mediterranean, off Madeira, and in the Japanese Sea; while its discovery now at the Cape of Good Hope will supply a further proof of its wide oceanic range. It is interesting to find both the type species of *Lophotes* and the very distinct *L. fiski* turning up in the same Bay within two years of each other.

South-African Museum, Cape Town,
30th June, 1891.

6. On a Specimen of *Pleurotomaria* from Tobago, West Indies. By R. J. LECHMERE GUPPY, C.M.Z.S.

[Received October 28, 1891.]

Among some shells placed in the Tobago Court at the Trinidad and Tobago Exhibition of 1890, my attention was soon drawn to a fine specimen of *Pleurotomaria*. On inquiry I found that the shell was the property of a gentleman of Tobago, off which island it had been obtained. The original owner having died, I was unable to obtain complete particulars respecting the acquisition of the shell, which after some negotiation became my property.

In an interesting paper by Henry Woodward, published in the 'Geological Magazine' for 1885, some particulars are given respecting the fossil and recent species of the genus, of which I avail myself. According to this author the number of fossil (extinct) species of *Pleurotomaria* is 1156, of which 226 are British. The genus was supposed to be entirely extinct until 1855, when the first living example was found by M. Beau off Mariegalante. This was described by Fischer and Bernardi in the 'Journal de Conchyliologie' for 1856 (p. 160, pl. v.) as *Pl. quoyana*. This specimen, 45 millimetres in height, was in 1873 purchased by Miss de Burgh, of London, for £25—a sum, as stated by the editors of the 'Journal de Conchyliologie,' rather below than above the real value of so rare a shell, of which, as stated by Woodward, only three examples are known up to the present time.

The next discovery of *Pleurotomaria* was in 1861, when a single imperfect specimen of another species came to light. This was described as *Pl. adansoniana* in the 'Journal de Conchyliologie' for that year (p. 163, pl. v.). This example was 86 millimetres in width and 74 in height. Another more perfect specimen of this species was taken near Guadelupe, and described in Journ. de Conch. 1882, p. 12, pl. i. This one was 85 millimetres in height and 91 in diameter.

It is to this species that the Tobago shell is to be referred. Besides the two examples named above, three others are known.

Two other living species of *Pleurotomaria* have been described—namely, *Pl. beyrichi* in 1877 and *Pl. rumphii* in 1879. The former was found in Japanese waters, and of it four examples are known. The latter is stated to be from the Moluccas, and only a single specimen is known. Consequently, according to the enumeration given in Woodward's paper, there were up to the present time thirteen specimens of recent *Pleurotomaria* in existence, belonging to four species. The Tobago specimen is therefore the sixth of the species and the fourteenth of the genus known as recent.

The dimensions of *Pl. quoyana* and *Pl. adansoniana* have already been given: those of the other two species are indicated below:—

	Height.	Diameter.
<i>Pl. rumphii</i>	170 mm.	190 mm.
<i>Pl. beyrichi</i>	82 „	83 „

The dimensions of the present specimen of *Pl. adansoniana* are as follows:—Total height 150 mm.; greatest diameter 160 mm.; height of aperture 50 mm.; width of umbilicus 30 mm.; length of fissure 220 mm.; width of fissure 5 mm. This, therefore, is the second in size of the specimens of recent *Pleurotomaria* in existence, being, in fact, very nearly as large as the unique specimen of *Pl. rumphii*, and leaving all the other known examples of the genus a long way behind. The coloration consists of a number of flames or irregular more or less zigzag spots of flesh-red passing into orange, arranged on a ground of very pale flesh tint. The apex is finely pointed, yellow, and almost smooth. When viewed through the funnel-shaped umbilicus and held to the light, it appears almost transparent. The supra-median fissure occupies the larger half of the contour of the shell. The characters generally correspond very closely with those given in the 'Journal de Conchyliologie,' 1882, p. 12. The colour of our specimen would appear, if we may judge by the figures, to be paler than the previous examples. It is in almost perfect condition, and looks as if when found it had had the soft parts in place. It is merely slightly house-worn, as an article which had been kept as a drawing-room ornament for several years would be.

As has been noticed, the habitat of *Pleurotomaria* is in deep water on rocky bottoms. Consequently it is probable that recent shells of this genus will always be rare; for not only is it difficult to procure shells living in such conditions, but the conditions themselves are of very restricted occurrence.

November 17, 1891.

Prof. Flower, C.B., LL.D., F.R.S., President, in the Chair.

The Secretary read the following report on the additions to the Society's Menagerie during the month of October 1891 :—

The registered additions to the Society's Menagerie during the month of October were 120 in number. Of these 85 were acquired by presentation, 12 by purchase, 10 on deposit, 12 by birth, and 1 by exchange. The total number of departures during the same period, by death and removals, was 83.

The most noticeable additions during the month were :—

A young Buffon's Skua (*Stercorarius parasiticus*), captured near Christchurch, Hampshire, and presented by Mr. E. Hart, F.Z.S. This species is new to our list.

A Land-Crab (*Geocarcinus ruricola*) from the Island of Fernando de Noronha, brought home and presented by Mr. D. Wilson-Barker, F.Z.S.

A letter was read from Dr. G. Martorelli, Secretary of the Italian Society of Natural Sciences, Milan, enclosing a coloured drawing of both sexes of a hybrid Duck, bred in the public garden of Milan, between a male *Branta rufina* and a female *Anas boschas* two years ago. Six young ones were hatched, 3 male and 3 female.

A communication was read from Mr. H. Nevill, F.Z.S., urging the importance of founding an experimental Zoological Station in the Tropics, and advocating the claims of Trincomalee in Ceylon for such an Institution.

The following papers were read :—

1. Descriptions of new Species of Shells from New South Wales, New Guinea, the Caroline and Solomon Islands.
By EDGAR A. SMITH, F.Z.S.

[Received October 6, 1891.]

(Plate XL.)

The following species are based upon specimens which form part of a very valuable donation of shells from various localities, presented to the British Museum by Mr. John Brazier of Sydney, by whom the National Collection has over and over again been enriched with very many new and interesting forms of Mollusca and other branches of Zoology.

Most of the specimens have been collected by Mr. Brazier himself, and consequently are accompanied by precise information respecting their localities.



1.

7.



8.



8a.



4.



10a.



5.



10.



9.



6.



9a.



2.



3.

R. Minter del. et lith.

Minter Bros. Chromo lith.

NEW SPECIES OF SHELLS FROM AUSTRALIA,
NEW GUINEA & THE CAROLINE & SOLOMON ISLANDS.

CONUS INNOTABILIS. (Plate XL. fig. 1.)

Testa parva, albida, flammulis longitudinalibus irregularibus fuscis vel rufescentibus picta, transversim anguste sulcata, sulcis longitudinaliter striatis, subpunctatis, quam interstitiis planis longe angustioribus; spira breviter conica rufo maculata; anfractus declives, plani, sulcis spiralibus tribus sculpti, sutura subcanaliculata sejuncti, ultimus superne obtuse angulatus, infra angulum lateribus levissime convexis, antice subconstrictus; apertura angusta, sordide albida vel pallide fuscescens.

Longit. 18 millim., *diam.* 10.

Hab. Rocky Point, four miles north of Richmond River, N. S. Wales; also Port Stephens near Sydney (*Brazier*).

This is an insignificant-looking species without any very marked features. The coloration is indefinite, but the spiral sculpture is well-marked. The sulci are scarcely half as wide as the spaces between them, which are flattened, and about twenty-four in number on the body-whorl.

MITROMORPHA BRAZIERI. (Plate XL. fig. 2.)

Testa ovato-fusiformis, spiraliter tenui-striata, lineis incrementi sculpta, pallide fuscescens, lineis transversis albo et rufo articulatis indistinctis, picta; anfractus 5, supremi duo (nucleus) magni, globosi, læves, nitidi, cornei, cæteri convexiusculi, sutura distincta leviter obliqua sejuncti, ultimus elongatus, antice parum contractus; apertura elongata, intus pallide fuscescens, antice late canaliculata, longit. totius $\frac{1}{2}$ superans; labrum tenue; columella superne leviter concava, infra oblique torta, callo tenui nitente induta.

Longit. $6\frac{1}{2}$ millim., *diam.* 3; *apertura* $3\frac{1}{2}$ longa, $1\frac{1}{4}$ lata.

Hab. Off Green Point, Watson Bay, Port Jackson, in 8 fathoms, on a bottom of broken shells, sand, and small stones (*Brazier*).

From the large size of the nucleus of this shell it was thought that possibly it might be the young state of some largish species. However, none were found with which it could be satisfactorily identified. The most distinguishing feature is the broad open anterior canal and the oblique lower portion of the columella.

I have placed it temporarily in the genus *Mitromorpha*, as it has spiral sculpture, the anterior canal, and the general form of that group of *Pleurotomidæ*. The operculum is unguiculate, and nearly two thirds as long as the aperture.

LITTORINA ACUTISPIRA. (Plate XL. fig. 3.)

Testa parva, elongata, superne acuminata, saturate grisea, infra suturam et circa basim anfract. ultimi flavescens, undique rufo vel fusco alboque punctulata; anfractus 7, leviter convexi, striis paucis spiralibus lineisque incrementi obliquis sculpti, ultimus interdum infra suturam obsolete constrictus; apertura late pyriformis, longit. totius $\frac{1}{2}$ plerumque haud æquans, intus nigro-castanea, ad labium tenuiter luteo-marginata, zona

basali lutea ornata; columella late expansa, obliqua, nigrescens.

Longit. 7 millim., *diam. maj.* $3\frac{1}{2}$; *apertura* 3 longa, $2\frac{1}{4}$ lata.

Hab. Common in rock-pools at Green Point, Watson Bay, Port Jackson, N. S. Wales; also Parsley Bay, Port Jackson (*Brazier*).

Although of small size, the specimens described are evidently adult. The species is remarkable for its produced acuminate spire, the deep chestnut aperture bordered with a yellow outer lip, the almost black columella, and the red and white punctate character of the markings. This spotting is hardly visible to the naked eye, and excepting under a lens the shell has a general dark slaty appearance, yellowish at the suture and the base of the body-whorl.

LITTORINA INFANS. (Plate XL. fig. 4.)

Testa minuta, ovata, superne acuminata, ad apicem sæpe erosa, nigrescens, circa basim zona pallida albo rufoque notata ornata; anfractus 5, *convexiusculi, striis incrementi tenuibus sculpti, ultimus ad medium subangulatus; apertura nigrescens, zona basali pallida ornata, longit. totius* $\frac{1}{2}$ *adæquans, ovata, superne acuminata, antice effusa; peristoma tenue, marginibus callo tenui junctis, columellari expanso, nigro.*

Longit. $3\frac{1}{2}$ millim., *diam.* $2\frac{1}{3}$; *apertura* $1\frac{2}{3}$ longa, $1\frac{1}{4}$ lata.

Hab. Green Point, Watson Bay, Port Jackson. Found in rock-pools washed by ordinary high tides (*Brazier*).

This minute species like the preceding also appears to be adult. It is generally almost black, excepting the basal spotted zone, but occasionally specimens occur which are also more or less tessellated above.

HELIX (PAPUINA) AGNOCHEILUS¹. (Plate XL. fig. 5.)

Testa semiobtecte umbilicata, depresso turbinata, solidiuscula, lineis incrementi oblique flexuosis conspicue lirato-striata, sub epidermide flavo-clivacea nitida albida, zonis pluribus (interdum obsoletis) nigrescentibus cincta; spira late conoidea, ad apicem fusco-nigrescentem haud acuminata; anfractus $4\frac{1}{2}$, *celeriter crescentes, convexi, infra suturam linea nigrescente marginati, ultimus in medio acute rotundatus, antice valde descendens; apertura transversa, obliqua, intus alba, lilaceo-fuscescens vel nigrescens callo tenui opalescente obscurata; peristoma niveum, late expansum et reflexum, marginibus conniventibus, callo tenui junctis, columellari intus inferne truncato, supra umbilicum late dilatato et reflexo.*

Diam. maj. 42 millim., *min.* 33, *alt.* 34; *apertura cum labro* $21\frac{1}{2}$ longa, 25 lata.

Hab. Douglas River, British New Guinea.

This species is remarkable for the broad snow-white lip, the truncate columella, and the very strong thread-like lines of growth. It is variable in colour, sometimes being conspicuously banded or

¹ ἀγνός, pure; χεῖλος, lip.

entirely without bands excepting that at the suture. The bands do not extend quite to the outer lip, but stop short about 4 millims. from the margin. Three of the four specimens examined have a shallow concentric depression or furrow around the middle of the base of the body-whorl; but this is not an essential characteristic, as there is not the slightest trace of it in the fourth shell.

H. tomasinelliana of Tapparone-Canefri is very like this species in many respects, but is different in form, being higher in proportion to the width and with a flatter base.

PLACOSTYLUS GUPPYI. (Plate XL. fig. 6.)

Testa rimata, elongato-ovata, superne acuminata, solidiuscula, rufescens, epidermide fusca, superne plus minus detrita, induta, longitudinaliter rugose striata, interdum in anfractu ultimo obsolete malleata; anfract. 5-6, celeriter accrescentes, supremi tres planiusculi vel vix convexi, penultimus convexiusculus, ultimus magis convexus, magnus, oblongus, infra suturam obliquam submarginatus, leviter corrugato-plicatus; apertura inverse auriformis, longit. totius $\frac{1}{2}$ superans, longe intus pallide rufescens, labrum versus saturatior; peristoma incrassatum, leviter expansum, rufescens, marginibus callo tenui albido junctis, columellari in regione umbilici late expanso, in apertura plicam albam validam formante; apertura tuberculo albo prominente supra plicam columellarem armata.

Longit. 80 millim., *diam. maj.* 37; *apertura intus* 40 *longa*, 19 *lata*.

Hab. Solomon Islands.

Mr. Brazier does not know the particular island where this species is found. He possesses only five specimens of it, and of these he has most liberally placed two of the finest in the British Museum.

The species does not compare closely with any other form. It is rather ventricose, but less so than *Pl. eddystonensis*; but in other respects it is quite different. The epidermis is of a rich brown colour, here and there striped with a darker tint. The columellar fold and the tubercle above are strongly developed.

I have named this interesting species after Dr. H. B. Guppy, who has considerably advanced our knowledge of the fauna of the Solomon Islands.

PLACOSTYLUS CALUS¹. (Plate XL. fig. 7.)

Testa elongata, perforata, superne rufescens, in anfr. ultimo pallidior, epidermide flavo-olivacea tenui induta, incrementi lineis tenuibus striata, sub lente microscopice et irregulariter transversim striata; anfractus 6, celeriter crescentes, supremi parum convexi, ultimus elongatus, magnus, peroblique descendens, ad sinistram peculiariter inflatus vel gibbus;

¹ From *καλός*, beautiful.

apertura elongata, inverse auriformis, longit. totius $\frac{3}{5}$ adæquans, intus sordide albida, labrum versus fuscescens aut rufescens, dente parietali albo valido munita; plica columellaris valde prominens, alba; labrum expansum, subreflexum, carneo-rufescens, marginibus callo tenui junctis, columellari magis reflexo, umbilicum semiobtegente.

Longit. 78 millim., diam. maj. 33; apertura intus 44 longa, $14\frac{1}{2}$ lata.

Hab. Solomon Islands.

This species is about the size and general form of *Pl. macfarlandi* of Brazier, but differs in having the body-whorl a little longer in proportion to the spire, and the aperture is also more elongate, and the peristome is fleshy red and more expanded. It is more elongated than *Pl. macgillivrayi*, Pfeiffer, and has a less acuminate spire, but it agrees with it in the character of the columellar fold and the tubercle above it on the body-whorl.

PUPINA BRENCHEYI. (Plate XL. figs. 8, 8 a.)

Testa pupiformis, pallide fulva, nitidissima; anfract. $5\frac{1}{2}$, convexiusculi, celeriter crescentes, infra suturam linea pellucida angusta marginati, ultimus antice peroblique descendens, ad labrum subito brevissime ascendens, supra aperturam subplanulatus; apertura fere circularis, longit. totius $\frac{1}{3}$ paulo superans; labrum pallidum, antice subeffusum; incisura columellaris angusta, parva; dens parietalis acutus, labro sinu angusto sejunctus.

Longit. 7 millim., diam. $3\frac{1}{2}$; apertura $2\frac{1}{4}$ longa, 2 lata.

Hab. Lugunor Island, Mortlock group of the Caroline Islands.

This species was found by Mr. Brazier in very great profusion in thick dense bush near the sea-beach under old cocoanut husks, leaves, and decayed wood on very wet or damp ground.

This species is very like *P. (Registoma) complanata* of Pease, but differs in having the body-whorl a little flatter above the aperture, the parietal tooth and notch are more distinct, and the columellar slit is smaller and not so deep. Out of seventy specimens examined, two have the parietal notch entirely filled up with callus, and in others it is partially obliterated.

The name proposed by Mr. Brazier may be retained in remembrance of Mr. Julius Brenchley, whose liberality and kindly disposition were greatly valued by many friends.

OMPHALOTROPIS CAROLINENSIS. (Plate XL. figs. 9, 9 a.)

Testa ovato-fusiformis, superne acuminata, anguste umbilicata, pallide cornea vel rufescens, plus minus opaco-albo lineata et maculata; anfractus 6, convexi, lineis incrementi tenuibus striisque spiralibus tenuissimis obsoletis sculpti, sutura subprofunda vix obliqua sejuncti, ultimus rotundatus, infra medium plerumque haud maculatus, circa umbilicum carina obtusa instructus; spira conica, ad apicem subacuta; apertura ovata, superne leviter acuminata, antice ad carinam subeffusa, longit.

totius $\frac{3}{4}$ adæquans; peristoma tenue, marginibus callo tenui junctis, exteriore simplice, columellari anguste reflexo.

Longit. 7 millim., diam. maj. $3\frac{2}{3}$; apertura 3 longa, 2 lata.

Hab. Lugunor Island, Mortlock group of the Caroline Islands, also at Iris Island of the Rouk group (*Brazier*).

The reddish specimens, which are well marked with wavy lines and blotches of opaque white, are extremely pretty. Some specimens are almost entirely devoid of markings, being of a uniform pale horn colour, and when this painting is present it is invariably less conspicuous on the lower part of the body-whorl than above. The spiral striæ referred to in the preceding diagnosis are very feeble and only noticeable under a powerful lens.

DONAX BRAZIERI. (Plate XL. figs. 10, 10 a.)

Testa trigona, antice anguste rotundata, postice et superne angulata, valde inæquilateralis, albida vel grisea, umbones versus interdum livida vel lilacea, obsolete biradiata; area valvarum antica polita, radiatim tenuiter striata et prope angulum posticum subacutum concentricè rugose striata, postica carina circumscripta, radiatim tenuiter lirata, lirisque transversis leviter flexuosis granose cancellata; pagina interna polita, margine inferiore (interdum quoque postico) crenulato, lilaceofusca, albida vel fuscescens, versus marginem pallida, radiatim tenuiter substriata; linea pallii profunde et late sinuata.

Longit. 13 millim., alt. 10, diam. 6.

Hab. Rocky Point, four miles north of Richmond River, New South Wales.

Mr. Brazier observes respecting this species:—"I have never found this alive on any part of the coast, and suppose it to be a very deep-water species, as it is met with only after gales."

It is remarkably triangular, and occasionally almost quite equilateral. The posterior area of the valves is not glossy like the anterior and much more strongly sculptured. This coarser sculpture, however, just passes over the sharp angle which separates the two areas. The colour is variable both externally and within; but usually it is pale, with an indication of two broad rays, one near the angle and the other more towards the front. I have much pleasure in associating this pretty species with the name of its discoverer.

EXPLANATION OF PLATE XL.

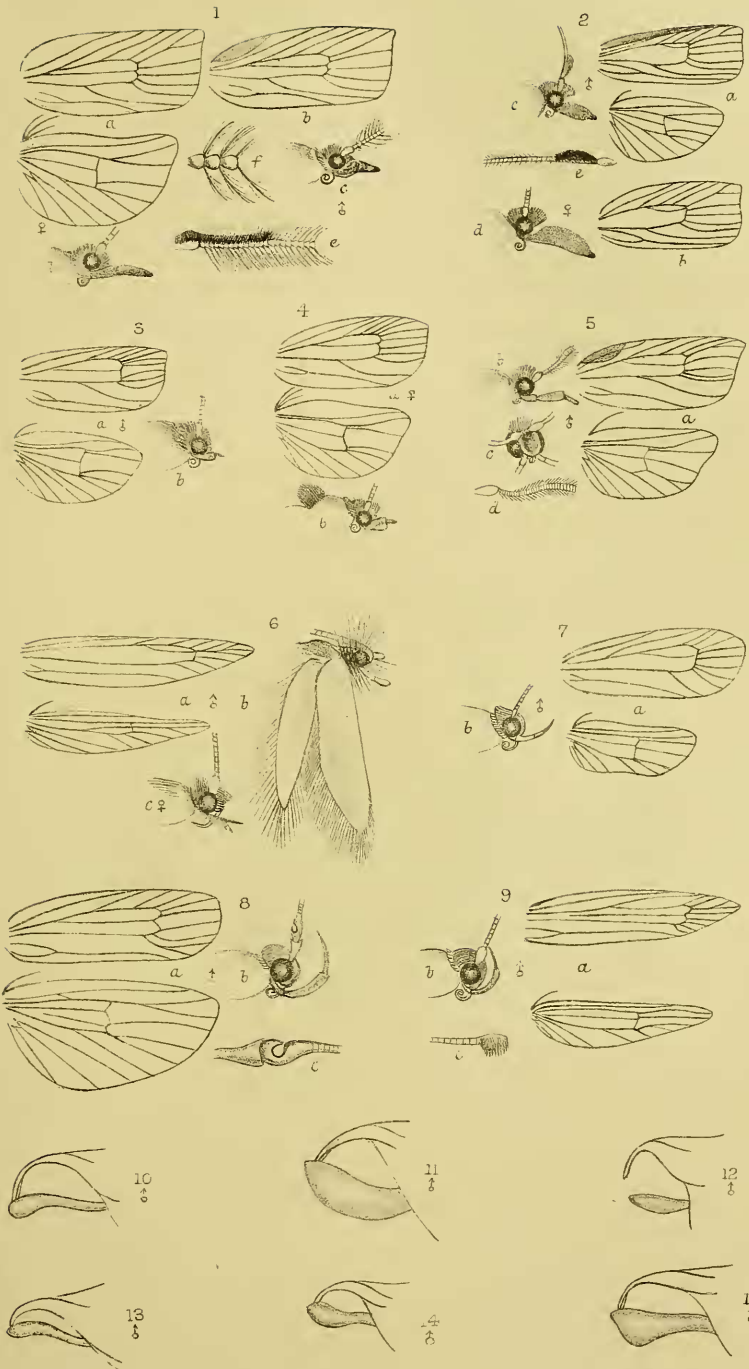
- Fig. 1. *Conus innotabilis*, p. 487.
- 2. *Mitromorpha brazieri*, p. 487.
- 3. *Littorina acutispira*, p. 487.
- 4. *Littorina infans*, p. 488.
- 5. *Helix (Papuina) agnocheilus*, p. 488.
- 6. *Placostylus guppyi*, p. 489.
- 7. *Placostylus calus*, p. 489.
- 8, 8 a. *Papina brenchleyi*, p. 490.
- 9, 9 a. *Omphalotropis carolinensis*, p. 490.
- 10, 10 a. *Donax brazieri*, p. 491.

2. On the Micro-Lepidoptera of the West Indies. By
the Rt. Hon. Lord WALSINGHAM, M.A., LL.D., F.R.S., &c.

[Received November 17, 1891.]

(Plate XLI.)

This paper is founded upon a collection of Micro-Lepidoptera made by Herbert H. Smith in the Island of St. Vincent, and placed in my hands by Mr. F. DuCane Godman. In order to identify the species it was necessary to study carefully all the descriptions of West-Indian forms which might probably be found among them. It is possible that some may yet have been overlooked, as they are scattered through a mass of periodical publications in at least three languages. Having so far made myself acquainted with the literature of the subject, it seemed desirable to supply such information as would facilitate a study of the geographical distribution, and with this view a tabulated index to all the West-Indian species is included in the paper. It has not been attempted to define or to follow any already defined faunistic West-Indian region; the term is used simply in its geographical sense, and includes the whole range of islands stretching from Yucatan to the coast of Venezuela. It would be interesting in this connection to obtain a representative collection from the peninsula of Florida and the adjacent islands, approaching, as they do, so nearly to the northern coast of Cuba, especially as the few species I have seen from that locality are remarkable, not only for their beauty and distinctness, but also for their evident alliance with the genera, and almost with the species, which have reached us from the mouth of the Amazons and from the northern portion of Brazil. It will be seen that, so far as our present knowledge extends, the Micro-Lepidoptera of these islands are somewhat highly specialized. Several new genera are described and others are mentioned which have not as yet been recognized elsewhere; but it must not be presumed that these will not ultimately be found to have a wider distribution. Had we been dealing with the Rhopalocera, or with any of the larger and more conspicuous Heterocera, a tabulated Index would have shown more nearly the true limitation of range in the different species; for these have been carefully collected and studied, and individual species are far less likely to have been overlooked than those of obscure and much neglected groups such as the *Tortricidæ*, *Tineidæ*, and *Pterophoridæ*. With the exception of three more or less cosmopolitan species, one of which, *Trichoptilus centetes*, Meyrick, seems out of place here (probably only because it has been described under other names from different parts of the world), the whole of the known West-Indian forms are decidedly American, ranging northward to the Southern and Western portions of the United States, and southward as far at least as Brazil; the majority, however, certainly belong to the truly Central-American fauna. I must acknowledge my indebtedness to Dr. Staudinger for allowing me to see several of



J. H. Durrant del.
F. W. Frohawk lith.

West Newman imp

Zeller's types, and to my friend Mr. Godman for placing this limited, but interesting and valuable collection in my hands. Mr. Druce has also kindly contributed several species from Dominica, and Mr. J. H. Hart has also been good enough to collect for me in Trinidad, and Mr. T. D. A. Cockerell in Jamaica.

PTEROPHORIDÆ.

AGDISTINÆ.

SCOPTONOMA, Z.

SCOPTONOMA TIPULOIDES, sp. n.

Antennæ pale cinereous.

Palpi whitish ochreous, streaked along the sides with black.

Head brownish above, with a dark brown triangle in front margined with whitish-ochreous lines passing from the base of the antennæ and meeting above the haustellum.

Thorax mottled with reddish brown, dark fuscous, and whitish ochreous.

Fore wings brownish, with numerous angulated whitish streaks, intermixed with dark fuscous streaks, lines, and shading; an oblique whitish line from the dorsal margin near the base terminates on the median vein at almost one third of the wing-length, this is preceded and followed by a few blackish scales, and the space within it has a somewhat longitudinally-striated appearance: from near the middle of the dorsal margin arises a second whitish oblique streak, angulated backwards about the middle of the wing, and thence again outwards along the median vein; throughout its length it is accompanied on its upper side by a narrow black line which is continued beyond it, first towards the anal angle and thence, after several deflexions, upwards to the apex and costal margin; this oblique double line forms the lower edge of two, almost connected, angular transparent rosy-white patches, the first extending from the submedian to the median vein, the second lying above the median, decidedly triangular, its base upon the lower edge of the cell, its apex reaching to the upper edge beyond the middle of the wing; the inner margins of these triangular patches being continuous, give them the appearance of one single oblique patch, but the ground-colour of the wing is carried through them very narrowly along the median vein; a dark fuscous or blackish shade clearly defines the inner and outer margins of the transparent patch, but the space below it is more tinged with brown than the apical portion of the wing beyond it, except along the costal and part of the apical margin: at two thirds from the base is a short semi-transparent streak dark-margined within, a little beyond which is a pale costal spot dark-margined on both sides: beyond this small costal spot we come to the other end of the black line (already described as arising from the dorsal margin before the middle in connexion with the pale streak below it); tracing it therefore, in the opposite direction, we find it arising at about one-sixth from the apex, running very obliquely

outwards nearly to the depressed apex itself, thence back at a very acute angle to a point opposite its origin, whence it is curved downwards and outwards towards the middle of the apical margin, with which it runs parallel until again curved above the anal angle, whence it can be traced to the triangular semi-transparent patch (up to which its course has already been described); the black line is margined on both sides with whitish-ochreous lines above the middle of the apical margin, and a short line of the same colour extends along the upper half of the margin to the apex, there is also a short streak above the anal angle; cilia whitish, with much dark fuscous mottling, especially at the apex, at the middle, and at the anal angle, but with a dark line running throughout them near the base. The markings to a great extent show through on the underside.

Hind wings semi-transparent, pale rosy æneous; the apex and outer half of the dorsal margin banded with blackish, as is also the costal margin; with three blackish spots, one below the middle of the costal band, one below the middle of the wing, and one at the abdominal angle (these are inconspicuous in specimens in less good condition); a slender whitish line runs parallel with the dorsal margin throughout the wing-length; cilia pale cinereous, with a dark line running through their middle. The markings to a great extent show through on the underside.

Abdomen whitish ochreous, mottled above with reddish brown mixed with dark fuscous; some slight lateral tufts along the segments are also of this mixed colour.

Legs pale whitish ochreous, unspotted.

Exp. al. 24 millim.

Hab. West Indies—Trinidad. (Port of Spain; 1 specimen received from Mr. J. H. Hart.)

Type, ♂ Mus. Wlsm.

I have also two specimens of this species from the Zeller Collection collected either by Baron von Nolcken or Petersen; but I have not been able to trace whether they were taken in the West Indies, Panama, or Colombia.

PTEROPHORINÆ.

TRICHOPTILUS, Wlsm.

TRICHOPTILUS CENTETES, MEYR.

Trichoptilus centetes, MEYR. Tr. Ent. Soc. Lond. 1886, pp. 16, 17: 1887, p. 266.

[?=*Pterophorus oxydactylus*, Wkr. Cat. Lp. Ins. B. M. xxx. p. 944 (1864), Ceylon.]

New Guinea, Australia, (? Ceylon).

West Indies—St. Vincent (windward side, 3 specimens, *Smith*).

This species has apparently a wide distribution, and is very nearly allied to *Trichoptilus* (*Aciptilus*) *californicus*, Wlsm., from Northern California; it has, however, darker hind wings and less white upon the surface and cilia of the fore wings. Specimens from Mexico and

Arizona cannot be separated from *T. centetes* ; but from their slightly paler colouring may perhaps be regarded as forming a connecting link between the Northern and Southern forms.

PLATYPTILIA, Hb.

PLATYPTILIA PUSILLIDACTYLA, Wkr.

Oxyptilus pusillidactylus, Wkr. Cat. Lp. Ins. B. M. xxx. p. 933 (1864).

N. syn.=*Platyptilia tecnidion*, Z. Hor. Soc. Ent. Ross. xiii. pp. 468-9, pl. vi. fig. 162 (1877).

Imago. February (Z.).

West Indies—Jamaica (*Wkr.*), St. Thomas (Z.).

PLATYPTILIA, sp., Snell.

Platyptilia, sp., Snell. Tijd. v. Ent. xxx. p. 66 (1887).

West Indies—Curacao (*Snell.*).

STENOPTILIA, Hb.

STENOPTILIA ? PUMILIO, Z.

Mimeseoptilus pumilio, Z. Ver. z.-b. Ges. Wien, xxiii. p. 324 (1873).

United States.—Texas (Z.).

West Indies—St. Vincent (windward side, 2 specimens, *Smith*).

The slender erect palpi as well as the neuration appear to separate this species from *Mimeseoptilus*, Wlgrn. (= *Stenoptilia*, Hb.), the genus in which it was placed by Zeller. The same form occurs in other species from South America ; but I prefer to study more material before coming to a decision upon its generic value.

ALUCITA, L.

ALUCITA THOMÆ, Z.

Leioptilus thomæ, Z. Hor. Soc. Ent. Ross. xiii. pp. 480-1, pl. vi. fig. 170 (1877).

Imago. December (Z.).

West Indies—St. Thomas (Z.).

ALUCITA BASALIS, Mschl.

Oedematophorus basalis, Mschl. Ab. Senck. Nat. Ges. xv. pp. 345-6, 354 (1890).

West Indies—Portorico (*Mschl.*).

ALUCITA PALEACEUS, Z.

Leioptilus paleaceus, Z. Ver. z.-b. Wien, xxiii. pp. 326-7 (1873).

Pterophorus paleaceus, Mschl. Ab. Senck. Nat. Ges. xv. pp. 346, 354 (1890).

United States.—Ohio (Z.), Texas (Z.).

West Indies—Portorico (*Mschl.*).

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ALUCITA BIPUNCTATUS, Mschl.

Pterophorus bipunctatus, Mschl. Ab. Senck. Nat. Ges. xv. pp. 346, 354 (1890).

West Indies—Portorico (*Mschl.*).

ALUCITA PARTICIPATUS, Mschl.

Pterophorus participatus, Mschl. Ab. Senck. Nat. Ges. xv. pp. 346, 354 (1890).

West Indies—Portorico (*Mschl.*).

ALUCITA PRÆUSTUS, Mschl.

Pterophorus praeustus, Mschl. Ab. Senck. Nat. Ges. xv. pp. 346, 354 (1890).

West Indies—Portorico (*Mschl.*).

PTEROPHORUS, Geoffr.

PTEROPHORUS AGRAPHODACTYLUS, Wkr.

Pterophorus agraphodactylus, Wkr. Cat. Lp. Ins. B. M. xxx. p. 941 (1864).

West Indies—San Domingo (*Wkr.*).

PTEROPHORUS ASPILODACTYLUS, Wkr.

Pterophorus aspidodactylus, Wkr. Cat. Lp. Ins. B. M. xxx. pp. 941-42 (1864); Btl. P. Z. S. 1878, p. 495.

West Indies—Jamaica (*Wkr.*).

PTEROPHORUS, sp., Mschl.

Aciptilia, sp., Mschl. Ab. Senck. Nat. Ges. xv. p. 346 (1890).

West Indies—Portorico (*Mschl.*).

ORNEODINÆ.

ORNEODES, Latr.

ORNEODES EUDACTYLA, F. & R.

Alucita eudactyla, F. & R. Reise Nov., Lp. pl. cxl. fig. 62 (1875); Mschl. Ab. Senck. Nat. Ges. xv. pp. 346, 354 (1890).

Colombia, Brazil.

West Indies—Portorico (*Mschl.*).

TORTRICIDÆ.

TORTRICINÆ.

APINOGLOSSA, Mschl. & Saalm.

APINOGLOSSA COMBURANA, Mschl.

Apinoglossa comburana, Mschl. Ab. Senck. Nat. Ges. xv. pp. 331, 354 (1890).

West Indies—Portorico (*Mschl.*).

CACÆCIA, Hb.

CACÆCIA JAMAICANA, Wkr.

Teras jamaicana, Wkr. Cat. Lp. Ins. B. M. xxviii. p. 291 (1863).

West Indies—Jamaica (*Wkr.*).

This species was wrongly included in *Teras* by Walker; it should be transferred to *Cacæcia*, with which it agrees in structure.

TORTRIX, L.

TORTRIX? EFFOETANA, Mschl.

Tortrix effoetana, Mschl. Ab. Senck. Nat. Ges. xv. pp. 330, 354 (1890).

West Indies—Portorico (*Mschl.*).

TORTRIX? INSIGNITANA, Mschl.

Tortrix insignitana, Mschl. Ab. Senck. Nat. Ges. xv. pp. 330–31, 354 (1890).

West Indies—Portorico (*Mschl.*).

These two species being described from females, it is impossible to say whether they are rightly referred to the genus *Tortrix*.

PTYCHAMORBIA, gen. n.

(πρύξ = a fold; *Amorbia*, nom. gen.)

Type, ♂ ♀ *Tortrix exustana*, Z. (Colombia). (Plate XLI. fig. 1, a-f.)

(*exustana*, Z., ♀ = *colubrana*, Z., ♂.)

Antennæ biciliate in the ♂, each ciliation formed of a group of several hairs, and with the first 14 and the basal joint thickened with a mat of scales above, somewhat lengthened at its abrupt termination; ♀ simple.

Palpi conical, densely clothed, apical joint moderate; projecting more than the length of the head beyond it in the ♂, twice the length of the head in the ♀.

Head moderately smooth; frontal scales projecting over the base of the palpi.

Thorax smooth.

Fore wings elongate, quadrate; costal margin arched before the middle, ♂ with a strong costal fold at the base; apex rectangular, apical margin slightly indented below the apex; dorsal margin slightly convex. *Neuration*: ♀ 12 veins; 7 and 8 with a long common stem, enclosing the apex: ♂ 11 veins (7 and 8 coincident).

Hind wings with the costal margin excavate before the apex in both sexes; apex rounded; apical and dorsal margins almost continuous, abdominal angle slightly dilated; ♀ with long hairs above at the base. *Neuration*: 8 veins; 3 and 4 from a point, 5 bent over to near base of 4.

Legs moderately clothed.

This genus partakes of the characters of *Amorbia*, Clem., and *Platynota*, Clem., resembling the first in the different neururation of the male and female, and the latter in the presence of a costal fold in the male. It is also allied to *Cerorrhineta*, Z., which agrees with *Platynota* in neururation, but differs in the structure of the antennæ and in the shape of the fold.

Zeller's type of *Tortrix* (*Enectra*) *exustana* (♀) is before me, and it is unquestionably the female of *Tortrix colubrana*, Z., of which the type (♂) is also in my collection. Both specimens are from Colombia. The differences in the neururation apparently misled Zeller in supposing them to be distinct, and caused him to refer them to different genera.

PTYCHAMORBIA CATENANA, sp. n.

Antennæ (♀) with the basal joint somewhat enlarged, simple; dark reddish brown.

Palpi projecting more than the length of the head beyond it; second joint smooth, somewhat thickly clothed above; apical joint moderate, exposed; reddish brown.

Head and thorax reddish brown.

Fore wings (♀) much arched at the base, straight beyond, apex somewhat produced; apical margin indented, not oblique; anal angle rounded. *Neururation*: 12 veins, 7 and 8 from a long common stem, enclosing the apex. Tawny reddish-brown with a very ill-defined basal patch, wider on the dorsal than on the costal margin; an ill-defined fasciaform shade commencing at one third from the base on the costal margin runs obliquely outwards to the middle of the wing, thence depressed to the dorsal margin scarcely beyond the middle; on this fascia are some obscure grey metallic spots; the apical portion of the wing is of the same darker shade as the fascia and contains two curved lines of grey metallic spots, the first running parallel with the central fascia from beyond the middle of the costa to the anal angle, the second again parallel beyond it; the space between these and the apex is also studded with similar spots; cilia pale ochreous, with a tawny-brown line along their base. Underside unicolorous shining brownish ochreous.

Hind wings much excised on the costal margin before the apex. *Neururation*: 8 veins, 3 and 4 from a point, 5 bent over and nearly touching the base of 4. Brownish ochreous, the apex shaded with fuscous scales; cilia shining pale ochreous, with a brownish shade along their base. Underside unicolorous shining brownish ochreous.

Abdomen ochreous.

Legs ochreous; hind tarsal joints shaded with fuscous.

Exp. al. 20-28 millim.

Hab. West Indies—St. Vincent (windward side, 2 specimens, Smith).

Brazil—Espiritu Santo (*Schmidt*).

Type, ♀.

I have little doubt that the male of this species will be found to possess but 11 veins in the fore wings, as in *T. colubrana*, Z. This

difference in the neuration of the male and female has hitherto been regarded as characteristic of *Amorbia*, Clem., which, however, has no costal fold in the male.

PLATYNOTA, Clem.

PLATYNOTA ROSTRANA, Wkr.

Teras rostrana, Wkr. Cat. Lp. Ins. B. M. xxviii. p. 290 (1863).

= *Teras restitutana*, Wkr. Cat. Lp. Ins. B. M. xxviii. p. 292 (1863).

= *Teras connexana*, Wkr. Cat. Lp. Ins. B. M. xxviii. p. 293 (1863).

Platynota rostrana, Wlsm. Ill. Typ. Lp. Het. B. M. iv. 5-6, pl. lxii. fig. 1 (1879); Fern. Tr. Am. Ent. Soc. x. no. 114, p. 22 (1882).

Larva. Leaves of orange. (U. S., *Fern.*)

United States—Florida (*Fern.*).

S. America—Venezuela (*Wkr.*), Brazil (*Ega*, *Wkr.*).

West Indies—San Domingo (*Wkr.*), St. Vincent (Kingstown and windward side, 2 specimens, *Smith*).

These two specimens are in poor condition and the dark markings are not distinctly outlined by lines of semi-raised scales as in the type. They are also somewhat smaller; but on the strength of such material I cannot regard them as anything more than a local form.

PLATYNOTA REPANDANA, Wkr.

Teras repandana, Wkr. Cat. Lp. Ins. B. M. xxviii. p. 292 (1863).

West Indies—San Domingo (*Wkr.*)

The type of this species is erroneously recorded by Walker as a female, it is a male.

CERATORRHINETA.

(*CERORRHINETA*, Z.)

Type, ♂ ♀ *Cerorrrhineta calidana*, Z. (Cuba). (Plate XLI. fig. 2, *a-e*.)

Antennæ, ♂, scaled and flattened beyond the basal joint, giving a bulged appearance, beyond which they are merely pubescent; ♀ simple.

Palpi, ♂, thickly clothed; long, curved downwards, apical joint short; ♀ very long (longer than in the ♂), much curved downwards, closely clothed throughout.

Head thickly clothed, with a slight projecting tuft.

Thorax smooth.

Fore wings, ♂, elongate, oblong; with a straight costal fold extending nearly to the apex: ♀ with the costal margin arched, especially towards the base: apical margin not oblique; with raised scales, as in *Platynota*, but these are not abundant. *Neuration* (♂ & ♀): 12 veins, 7 and 8 from a common stem, the fork enclosing the apex.

Hind wings (♂ & ♀) with the costal margin not excised. *Neuration*: 8 veins, 3 and 4 from a point, 5 slightly bent towards origin of 3 and 4, 6 and 7 approximate at origin.

Legs moderate, smooth.

CERATORRHINETA CALIDANA, Z.

Cerorrhineta calidana, Z., Hor. Soc. Ent. Ross. xiii. pp. 116-7 (1877).

West Indies—Cuba (Z.).

I am indebted to Dr. Staudinger for the opportunity of examining the types of this species.

CONCHYLIDINÆ.

CONCHYLIS, Tr.

CONCHYLIS LACTEIPALPIS, sp. n.

Antennæ luteous.

Palpi short, widened at the apex of the second joint with short appressed scales; apical joint short, distinct; cream-white.

Head creamy-white.

Thorax ferruginous, tending to pale ochreous posteriorly.

Fore wings mottled with dark chestnut-brown and bright ferruginous, the intermediate spaces whitish ochreous, apex and cilia whitish ochreous; basal patch rich ferruginous, somewhat angulated at its outer edge beyond the fold; a patch of dark chestnut-brown adjacent to it crosses the fold and extends, more or less interruptedly along the dorsal margin and fold to the lower angle of the cell; a rich ferruginous costal patch about the middle tapers obliquely outwards, and is separated from the other patches of chestnut scales beneath it by a rather shining leaden-grey streak; a rich ferruginous band crosses the wing obliquely before the apex, its inner edge nearly straight, its outer edge slightly angulated below its middle, this band commences on the costal margin at about one fifth from the apex, its lower edge reaching to about the middle of the apical margin; the space preceding it is mottled with rich ferruginous interspersed with leaden-grey scales on a cream-white ground; apex and cilia whitish ochreous.

Hind wings grey, with cilia of the same colour.

Abdomen grey; underside shining creamy-white.

Legs cream-white.

Exp. al. 8-10 millim.

Hab. West Indies—St. Vincent (windward side, 3 specimens, Smith).

Type, ♂.

CONCHYLIS PROLECTANA, Mschl.

Cochylis prolectana, Mschl. Ab. Senck. Nat. Ges. xv. pp. 332, 354 (1890).

West Indies—Portorico (Mschl.).

CONCHYLIS TECTONICA, Mschl.

Cochylis tectonica, Mschl. Ab. Senck. Nat. Ges. xv. pp. 332-3, 354 (1890).

West Indies—Portorico (*Mschl.*).

CONCHYLIS VICINITANA, Mschl.

Cochylis vicinitana, Mschl. Ab. Senck. Nat. Ges. xv. pp. 333, 354 (1890).

West Indies—Portorico (*Mschl.*).

CONCHYLIS BUNTEANA, Robs.

Conchylis bunteana, Robs. Tr. Am. Ent. Soc. ii. p. 288, pl. viii. fig. 86 (1869); Fern. Tr. Am. Ent. Soc. x. no. 144, p. 26 (1882).

United States—Pennsylvania (*Robs.*).

West Indies—St. Vincent (1 specimen, *Smith*).

A single specimen, probably referable to this species, is not in sufficiently good condition to be determined with certainty. The type has a slightly rosy tint, which is apparently wanting in this specimen (perhaps owing to its condition), but I should certainly regard it as a small variety of the same species.

CONCHYLIS, sp. ? (near *angulatana*, Robs.).

West Indies—St. Vincent (windward side, 1 specimen, *Smith*).

Another species of this genus, somewhat smaller than *angulatana*, Robs. [Tr. Am. Ent. Soc. ii. p. 286, pl. viii. fig. 81 (1869)], from the United States, but presenting the same general character of markings, is also not in condition to be usefully described.

CONCHYLIS, sp. ?

West Indies—St. Vincent (windward side, 1 specimen, *Smith*).

This specimen is in too poor condition to be determined.

*GRAPHOLITHINÆ.**BACTRA*, Stph.*BACTRA LANCEOLANA*, Hb.

Tortrix lanceolana, Hb. Tortr. fig. 80 (1800).

Aphelia lanceolana, Stgr. & Wk. Cat. Lp. Eur. (ii.) no. 1006, p. 251 (1871).

Bactra lanceolana, Fern. Tr. Am. Ent. Soc. x. no. 163, pp. 28-9 (1882).

Europe, Africa, Asia, Australia, New Zealand, United States.

West Indies—St. Vincent (windward side, 4 specimens, *Smith*).

EPISIMUS, gen. n.

(ἐπίσιμος=somewhat short-nosed.)

Type, ♂ *Carpocapsa transferrana*, Wkr. (Brazil). (Plate XLI. fig. 3, a, b.)

Antennæ with the basal joint slightly enlarged, very slightly ciliate, scarcely more than half as long as the fore wings.

Palpi short, moderately clothed; apical joint exposed, scarcely projecting beyond the face.

Head very wide, flattened to the thorax, the face between the eyes much flattened, moderately rough-scaled above.

Thorax smooth.

Fore wings elongate, costal margin almost straight, ♂ without a costal fold, apical margin very slightly concave, anal angle rounded. *Neuration*: 12 veins, all separate; 3 much bent up towards 4 on the outer margin.

Hind wings rather triangular, apex somewhat acute, dorsal margin slightly and evenly rounded. *Neuration*: 8 veins; 3 and 4 from a point, 5 bent over towards origin of 4.

Apparently allied to *Cacocharis*, Wlsm., but without a thoracic tuft. Veins 3 and 4 of the hind wings are as in the group of genera allied to *Penthina*, Tr., but the neuration of the fore wings approaches more nearly that of the *Pædisca* group.

EPISIMUS TRANSFERRANA, Wkr.

Carpocapsa transferrana, Wkr. Cat. Lp. Ins. B. M. xxviii. p. 398 (1863).

South America—Brazil (Ega, *Wkr.*).

Var. VINCENTANA (an sp. n.?).

West Indies—St. Vincent (1 specimen, *Smith*).

With a single specimen before me, in very poor condition, I should not venture to describe it as a distinct species. It is obviously very similar to Walker's type from Ega; the chalybeous black top of the head is a strong distinguishing character, and the markings on the wings are approximately in the same position. Walker describes the darker shades as the ground-colour of the wing, whereas the paler colouring actually predominates (more so in this variety than in the type); moreover they have scarcely a trace of fawn-colour, and would be more accurately described as creamy-white. The slender leaden cross-streaks which occur in the type are wanting in this specimen, but the transverse linear arrangement of the scales is precisely the same, and if some of the grey streaklets which compose the medio-costal patch were prolonged in the direction of the dorsal margin they would exactly correspond to these lines, which Walker omits to mention in his description. I cannot venture to regard this specimen as distinct from *E. transferrana*, but it is probably a local variety.

Exp. al. 14 millim.

Type, ♂.

EPISIMUS AUGMENTANA, Z.

Grapholitha (Hedya) augmentana, Z. Hor. Soc. Ent. Ross. xiii. pp. 162-3 (1877).

West Indies—Cuba (Z.).

I am indebted to Dr. Staudinger for the opportunity of examining the type of this species.

CACOCHARIS, gen. n.

(κακόχαρας=ill-omened.)

Type, ♂ ♀ *Cacocharis albimacula*, Wlsm. (Plate XLI. fig. 4, a, b.)

Antennæ not more than half the length of the fore wings, simple in both sexes.

Palpi placed rather wide apart, short, projecting but little beyond the head; second joint somewhat dilated at the apex above and beneath; apical joint short, distinct.

Head moderately crested above.

Thorax with a strong erect crest posteriorly.

Fore wings rather ovate, costal margin slightly arched, ♂ without a costal fold, apex obtuse, apical margin not indented nor oblique, anal angle rounded. *Neuration*: 12 veins, all separate; 3 bent up towards 4 on the apical margin; 6 slightly bent down towards 5.

Hind wings trapezoidal, apex rounded, somewhat bulged between the apical and dorsal margins. *Neuration*: 8 veins; 3 straight, 4 from the same point as 3, bent upwards towards 5 on its basal half; 5 closely approximate to 4 at the base.

Legs with the hind tibiæ stout, somewhat clothed.

This genus is intermediate between *Pædisca*, Tr., and *Penthina*, Tr., approaching the latter in the possession of a thoracic tuft and in having veins 3 and 4 of the hind wings from a point; in all other respects it belongs to the group of *Pædisca*, but is without a costal fold.

CACOCHARIS ALBIMACULA, sp. n.

Antennæ and *palpi* reddish brown.

Head reddish brown.

Thorax reddish brown, with a conspicuous bright chestnut tuft posteriorly, preceded and followed by some whitish scales.

Fore wings rich chestnut-brown, with a conspicuous white costal patch about the middle of the wing, containing two or three minute black streaklets on the extreme costal margin; mottled with fuscous and purplish-grey patches; the white costal patch is preceded and followed by a fuscous tinge; a brownish patch lies on the outer half of the fold, and a blackish patch of somewhat raised scales near the base of the dorsal margin is surrounded by purplish grey; about the outer end of the brown patch is another space of purplish grey, and between this and the apical margin another transverse patch of the same colour, somewhat paler; one or two very faint pale oblique streaklets, from the costa before the apex, are joined to a slender pale line along the margin at the base of the cilia, which, however, does not reach the anal angle; cilia brown, tipped with fuscous.

Hind wings fuscous, with an iridescent tinge; cilia fuscous.

Abdomen fuscous.

Legs pale greyish cinereous; hind tarsal joints spotted with fuscous.

Exp. al. 14 millim.

Hab. West Indies—St. Vincent (1 specimen, *Smith*).

Type, ♀.

Having only a single ♀ of this species from St. Vincent I have used a ♂ from Brazil in drawing up the generic description.

PHOXOPTERIS, Tr.

PHOXOPTERIS VIRIDIDORSANA, Mschl.

Phoxopteryx virididorsana, Mschl. Ab. Senck. Nat. Ges. xv. pp. 334, 354 (1890).

West Indies—Portorico (*Mschl.*).

GRAPHOLITHA, H.-S.

GRAPHOLITHA LIVENS, sp. n.

[*Head* missing.]

Thorax slaty grey.

Fore wings deep brownish fuscous, mottled with curved bands and spots of slaty-grey; the basal half of the wing is entirely occupied by transverse bands of this colour, separated from each other by slender lines of the dark ground-colour, of which one is longitudinal from the base, reaching but a short way into the wing; one above it, also short, is oblique from the costa; and one below it from the dorsal margin, somewhat wider, pointed obliquely outwards; the outer edge of the mottled basal patch is curved outwardly, reaching much farther along the dorsal than on the costal margin, where it does not attain to the middle of the wing; about the middle of the wing is an outwardly oblique costal streak of slaty-grey, curved at its lower end and more or less blended with a shorter streak beyond it; between this pair of streaks and the apex of the wing are three other similar streaks, the first running obliquely outwards from the costa to the upper third of the apical margin, where it meets a shorter and less oblique subapical streak; between these two is a third very short streaklet on the extreme costal margin; all these five streaks are touched with whitish scales, and some are also visible on the extreme costal edge of the basal patch; above the anal angle is an irregular, somewhat ocelloid, spot formed of two curved slaty-grey streaks; throughout the wings these slaty-grey bands are somewhat shining in contrast with the dull ground-colour; cilia dark slaty-grey. Underside unicolorous brownish fuscous, with five small whitish costal spots.

Hind wings brown; cilia pale grey.

Abdomen brownish.

Legs pale greyish; hind tarsal joints spotted alternately with greyish white and fuscous.

Exp. al. 12 millim.

Hab. West Indies—St. Vincent (1 specimen, *Smith*).

Type, ♀.

This specimen has unfortunately lost its head; there can be no doubt as to the genus in which it should be placed, but in markings

it is very distinct from anything with which I am acquainted. The pattern, although difficult to describe, is fairly well-defined.

GRAPHOLITHA ? EXCITANA, Mschl.

Grapholitha excitana, Mschl. Ab. Senck. Nat. Ges. xv. pp. 333-4, 354 (1890).

West Indies—Portorico (*Mschl.*).

COPTOLOMA, Ld.

COPTOLOMA ? FIGURANA, Z.

Grapholitha (Coptoloma ?) figurana, Z. Hor. Soc. Ent. Ross. xiii. pp. 163-5, pl. ii. fig. 55 (1877).

Imago, 17 December (Z.).

West Indies—St. Thomas (Z.).

COPTOLOMA ? ALBICAPITANA, sp. n.

Antennæ fuscous.

Head and *palpi* white.

Thorax fuscous.

Fore wings brownish fuscous, blending to ferruginous brown, about the apex much streaked and dotted with cream-white and steel-blue lines and spots; a steel-blue spot at the base of the costal margin is followed before the middle by an oblique short costal streak of the same colour, and this is also followed, beyond the middle, by a more slender similar streak, bulging outwardly, dilated and deflected towards the anal angle; near the dorsal margin, at one third from the base, is a cream-white spot, from above which a slender cream-white line, shaped like a horseshoe, is bowed outwards, and returns to a smaller cream-white spot above the fold, enclosing the outer end of a short longitudinal steel-blue streak; above the middle of the dorsal margin is a small steel-blue spot followed by another slightly above and beyond it, which is separated from a third elongate spot above the middle of the wing by a slender cream-white line; the two lower of these spots are enclosed by slender waved cream-white lines, at a little distance from them but following their outline; these lines do not reach the dorsal margin nor do they meet between the spots; on the chestnut-brown apical portion of the wing are two or three cream-white costal spots or streaks, the outer one being the longest, and having some steel-blue scales at its lower end; between these spots and around the apex the extreme margin of the wing is fuscous; cilia blue-grey. Under-side unicolorous greyish fuscous, with three costo-apical white spots or streaks.

Hind wings brownish fuscous, darker towards the apex; cilia greyish.

Abdomen fuscous; underside cream-whitish.

Legs greyish fuscous; spurs paler.

Exp. al. 10 millim.

Hab. West Indies—St. Vincent (windward side, 1 specimen, *Smith*).

Type, ♀.

Having only a ♀ I am unable to be quite certain that this species is rightly referred to *Coptoloma*, Ld.

PÆDISCA, Tr.

PÆDISCA LONGIPALPANA, Mschl.

Grapholitha (*Pædisca*, Ld.) *longipalpana*, Mschl. Ab. Senck. Nat. Ges. xv. pp. 333, 354 (1890).

West Indies—Portorico (*Mschl.*).

CROCIDOSEMA, Z.

CROCIDOSEMA PLEBEIANA, Z.

Crocidosema plebeiana, Z. Is. 1847, p. 721; Stgr. & Wk. Cat. Lp. Eur. (ii.) no. 1269, p. 263 (1871).

Europe, Australia, South America (*Wlsm.*).

West Indies—St. Vincent (Kingstown, 1 specimen; windward side, 3 specimens, *Smith*).

This genus is apparently widely distributed in South America, as I have specimens from Brazil, Peru, and the Argentine Republic.

STREPSICRATES, Meyr.

Strepsicrates, Meyr. Tr. N.-Z. Inst. xx. p. 73 (1887).

= § *Strepsiceros*, Meyr. Proc. Linn. Soc. N. S. W. vi. pp. 678–9 (1882).

STREPSICRATES SMITHIANA, sp. n.

Antennæ cinereous.

Palpi cinereous, mottled with brownish at the ends of the joints externally, hoary on their inner sides.

Head brownish cinereous, the lower half of the face hoary.

Thorax cinereous.

Fore wings dark brownish, pale cinereous along the dorsal margin beneath the fold; in the ♂ the costal fold is dark brown with a pale costal patch at its outer end, there is also a tuft of raised scales below the middle of the fold, and tufts of similar darker scales near the base above and below the fold; in the ♀ the tufts of raised scales are absent, and there appears to be some slight variation in the mottling of the wing-surface, the dark brown ground-colour becoming especially concentrated along the middle and above the outer end of the fold; the apical portion of the costa is much mottled with pale cinereous, which is diffused across the wing obliquely backwards towards the outer end of the fold; some pale cinereous scales about the anal angle; cilia brownish, tending to pale cinereous at the anal angle.

Hind wings semitransparent, blue-grey, obscured with brown

along the veins and margin, especially towards the abdominal margin; cilia cinereous, with a pale line along their base.

Abdomen brownish cinereous.

Legs pale cinereous; hind tarsal joints faintly speckled.

Exp. al. 13–14 millim.

Hab. West Indies—St. Vincent (windward side, 3 specimens, *Smith*); Dominica (one specimen given me by Mr. H. Druce).

Type, ♂ ♀.

This species agrees in structure with *ejectana*, Wkr., an Australian species. I may remark that veins 6 and 7 of the hind wings, although perhaps not actually from a common stem, have so much the appearance of being so that a mistake might easily arise. They are almost anastomosed along their basal half, having the appearance of a double vein grooved along its under surface rather than of two separate veins. I find the same structure prevailing in the Australian species.

HELIGMOCERA, gen. n.

(ἐλιγμός=a sinuosity; κέρας=a horn.)

Type, ♂ *Heligmocera calvifrons*, sp. nov. (Plate XLI. fig. 5, a–d.)

Antennæ (♂) stout, strongly pubescent beneath; basal joint thickened, beyond which is a strong sinuosity on the upper side, extending over several joints.

Palpi not thickly clothed, with the basal joint unusually long, slightly upturned; second joint long, projecting forward; apical joint fully half the length of the second, slightly depressed.

Haustellum very short.

Head clothed above; face flattened, almost excavate between the eyes, and sloping back to the base of the antennæ.

Thorax not tufted.

Fore wings elongate, costa slightly arched, ♂ with a strong costal fold containing a thick mat of hairs; apical margin oblique, slightly concave, apex slightly produced, anal angle rounded. *Neuration*: 12 veins; 3 and 4 closely approximate throughout, curved upwards nearly to middle of apical margin; 5 straight, arising very near 4, about the lower angle of cell and ending on the middle of the apical margin in close proximity to 4; 6 bent down towards 5 on margin; 7 and 8 from a common stem, 7 bent down towards 6, 8 to costal margin above apex; 9 arising from upper angle of cell close to origin of 7+8.

Hind wings broader than the fore wings, with a broadly lanceolate apex, abdominal angle strongly developed and heavily fringed, especially at the base. *Neuration*: 8 veins; 3 and 4 from a long common stem; 5 bent over to origin of 3+4; 6 and 7 from a common stem.

Legs: hind tibiæ densely clothed with projecting scales above the spurs.

HELIGMOCERA CALVIFRONS, sp. n.*Antennæ* cinereous.*Palpi* cinereous.*Head* cinereous above; face whitish.*Thorax* cinereous.

Fore wings (♂) with a broad costal fold; cinereous, mottled with brownish; with an ill-defined greenish basal patch, mottled with brownish, extending along the dorsal margin to nearly one third the wing-length, where is a patch of deep brownish fuscous scales; beyond it is a broad ill-defined pale space; the apical half of the wing mottled with greenish and brownish fuscous; a chestnut-brown spot immediately before the anal angle; the costal margin very pale cinereous, almost whitish, with a series of oblong brownish fuscous streaks alternately short and long, the long ones terminated by a few chestnut-brown scales; there are some shining greenish-grey metallic scales about the ocelloid spot which is separated from the apex by a curved brownish fuscous line occupying the middle of the apical margin, and recurved in the direction of the upper angle of the cell, where it nearly joins the middle costal streak, the extreme apex brownish fuscous; cilia pale cinereous along their base, brownish fuscous beyond.

Hind wings semitransparent, iridescent, blue-grey, matted with brownish cinereous scales about the abdominal margin, and with a strong fringe of subochreous matted scales from the base near the abdominal margin; cilia greyish fuscous, with a pale line along their base.

Abdomen brownish fuscous mottled with pale cinereous, anal tuft paler. Underside pale cinereous.

Hind legs brownish fuscous mottled with pale cinereous, tarsal joints also spotted with pale cinereous or subochreous.

Epp. al. 13 millim.

Hab. West Indies—St. Vincent (windward side, 2 specimens, Smith).

Type, ♂.

TINEIDÆ.**TINEINÆ.****TINEA, L.****TINEA PLUMELLA**, sp. n.

Antennæ with the basal joint slightly hairy; greyish, with indistinct paler annulations.

Maxillary palpi folded.

Labial palpi short, projecting; greyish.

Head hairy above and in front; dingy grey.

Thorax pale whitish grey.

Fore wings dingy whitish, sprinkled with brownish-grey scales, especially on the basal half; a brownish-grey spot at the base of the fold; an indistinct transverse fasciaform band of scattered brownish-grey scales about the middle is diffused outwards on reaching the

fold, reverting to the dorsal margin; beyond it the white ground-colour is less sprinkled for a short space, but the apical third of the wing is blotched with brownish-grey spots, more or less connected by intermediate scattered scales—one central at the end of the cell; two costal, the first immediately above the central one, the other beyond it; one apical at the extreme apex; two less conspicuous dorsal ones, the first small, immediately below the central spot, the second also inconspicuous, immediately opposite the outer costal spot; cilia dingy whitish, with some brownish-grey scales running through them wherever the dark spots touch the margin.

Hind wings pale grey; cilia whitish grey.

Abdomen very pale brownish grey.

Exp. al. $6\frac{1}{2}$ millim.

Hab. West Indies—St. Vincent (1 specimen, *Smith*).

Type, ♀.

A small but sufficiently distinct species, probably approaching *cumulatella*, Z., from South America, but having a whiter ground-colour.

TINEA sp.

West Indies—St. Vincent (1 specimen, *Smith*).

A single specimen in too poor condition to determine.

Exp. al. 6 millim.

TINEA ? sp., Btl.

Tinea ? sp., Btl. P. Z. S. 1878, p. 495.

West Indies—Jamaica (*Btl.*).

DENDRONEURINÆ, subfam. nov.

Labial palpi strongly developed, folded.

Fore wings with veins 5, 7, and 8 out of 6.

DENDRONEURA, gen. nov.

(*δένδρον* = a tree; *νεῦρον* = a nerve.)

Type, ♂ *Dendroneura præstans*, Wlsm. (Plate XLI. fig. 6, *a-c.*)

Antennæ nearly as long as the fore wings; basal joint flattened, scarcely enlarged.

Maxillary palpi well developed, folded.

Labial palpi short, depressed, clothed with appressed scales; apical joint scarcely shorter than the second, flattened, subovate.

Haustellum moderate.

Head much flattened, with a strong brush of radiating scales from each side behind the eyes.

Thorax somewhat flattened, smooth.

Fore wings long, narrow, acuminate, costal and dorsal margins nearly straight, anal angle obsolete; a narrow mat of scales along the costal margin beneath gives the appearance of a downward fold.

Neuration: 12 veins; 2 from near lower angle of cell; 3 from angle of cell; 4 separate from 3; 6 from upper angle of cell to apical

margin; 7 and 8 one after another out of 6, the one before, the other behind the origin of 5, 7 to costa; 9, 10, and 11 separate; a small supplementary cell caused by the continuation of 6 to between 10 and 11.

Hind wings narrow, evenly lanceolate, acuminate; with very long cilia extending to the base of the costal margin. *Neuration*: 8 veins; 3 and 4 separate; 5 and 6 from a common stem, 6 to apex; 7 parallel with 6.

Abdomen somewhat flattened.

Legs with the hind femora much flattened and somewhat concave at their outer sides; hind tibiæ hairy.

This very inconspicuous and ordinary-looking Tineid differs entirely in its structural characters from any genus or subfamily hitherto described; the neuration is very peculiar, somewhat resembling that of *Æcoecis*, Gn., to which, however, it is not allied.

A single female, possessing the same remarkable neuration which characterizes this genus, differs in the structure of the palpi and in the slightly greater expanse and breadth of the wings. Having at first regarded it as a separate species, I am now strongly convinced that it is but the other sex of *Dendroneura præstans*. A description, so far as it indicates structural differences, is appended:—

Labial palpi porrected, scarcely twice the length of the head; second joint with a projecting brush of scales below, a pecten of three or four separate hairs on its outer side near the apex; apical joint smooth, short, scarcely more than half the length of the second joint, not recurved nor erect.

Abdomen laterally compressed; ovipositor extended, long.

If any reasonable doubt can be entertained as to the identity of this female with the male on which the genus is founded, it must be based upon the difference in the shape of the head, which is of the ordinary form, not flattened or fringed at the side in the manner so remarkable in the type.

DENDRONEURA PRÆSTANS, sp. n.

Antennæ and *palpi* pale greyish ochreous.

Head pale greyish ochreous; face shining white.

Thorax dull greyish ochreous.

Fore wings dull greyish ochreous, with a narrow transverse line of slightly raised brownish fuscous scales before the apex, at the upper end of which is a minute oblique spot of similar scales turning backwards from the costal margin; cilia dull greyish, with an ochreous tinge.

Hind wings pale greyish, with a slight ochreous tinge; cilia greyish, tinged with ochreous towards their apex.

Abdomen rather shining, ochreous.

Legs shining, pale cinereous; tarsal joints unspotted.

Exp. al. ♂ 12 millim., ♀ 14 millim.

Hab. West Indies—St. Vincent (windward side, 2 specimens, Smith).

Type, ♂.

SETOMORPHINÆ.

SETOMORPHA, Z.

SETOMORPHA RUPICELLA, Z.

Setomorpha rupicella, Z. Hand. Kong. Svensk. Vet.-Ak. 1852, pp. 95-6.

West Indies—Cuba (Havannah, Z.).

This species, having been described by Zeller in a paper entitled "Lepidoptera Microptera quæ J. A. Wahlberg in Caffrorum terra collegit," is not unlikely to be overlooked.

ANAPHORINÆ.

EULEPISTE, Wlsm.

Type, *Eulepiste cressoni*, Wlsm. (United States).

In the original description of this genus (Tr. Am. Ent. Soc. x. p. 169, 1882), which was not corrected in my revision of the *Anaphorinæ* (Tr. Ent. Soc. Lond. 1887, p. 142), I fear that I must have mistaken the basal joint of the palpi for the second joint, the second joint being much less roughly clothed than the basal, and the apical joint is almost smooth. The proportionate length that they bear to each other is approximately as follows:—the second joint is rather longer than the apical joint, and the basal joint is about equal in length to the second; the apical joint stands for its whole length clear above the head, but it is not recurved.

EULEPISTE UMBRATIPALPIS, sp. n. (Plate XLI. fig. 10.)

Antennæ pale fawn, closely barred above with dark umber-brown, basal joint dark umber-brown above.

Palpi very dark umber-brown.

Head pale fawn above, speckled with dark umber-brown.

Thorax pale fawn, shaded anteriorly and around the margins with dark umber-brown and a few reddish-brown scales.

Fore wings pale fawn, thickly spotted and shaded with dark umber-brown, with some reddish-brown scales intermixed, the markings on the costal margin somewhat more distinctly separated from each other than are those on the wing-surface; the most conspicuous and darkest shading is above the anal angle, on the space between the end of the cell, and on the lower half of the costal margin; cilia dark umber-brown, mixed with pale fawn and reddish brown. Underside shaded with dark umber-brown, a pale fawn line running along the base of the cilia and around the apical margin.

Hind wings cinereous, a slightly paler line running along the base of the cilia. Underside cinereous.

Abdomen cinereous; lateral claspers slender, evenly depressed posteriorly; uncus slender, double, the points closely approximate.

Hind legs dark brownish; tarsal joints spotted with pale fawn.

Exp. al. 19 millim.

Hab. West Indies—San Domingo, 1884.

Type, ♂ Mus. Wlsm.

I have a single specimen, for which I am indebted to Dr. Fernald.

ACROLOPHUS, Poey.

ACROLOPHUS VITELLUS, Poey. (Plate XLI. fig. 11.)

Acrolophus vitellus, Poey, Cent. Lp. Cuba, pl. (xx.) (1833); Wlsm. Tr. Ent. Soc. Lond. 1887, p. 148.West Indies—Cuba (*Poey*) ; ? Portorico (*Wlsm.*).

A specimen in Dr. Staudinger's collection from Portorico agrees with Poey's description in the structure of the palpi and antennæ as well as in neuration ; the fore wings have the usual indication of a biangulate line along the neighbourhood of the fold, margined with dark shades above and by the pale ground-colour below, this line runs slenderly but distinctly to the base ; two angular dark shades cross the fold, the outer one being connected on the left wing by two lines of darker scales to the middle of the dorsal margin ; costal margin distinctly spotted, the spots near the base taking the form of waved striæ reaching to the upper edge of the cell. The hind tarsal joints are somewhat strongly clothed with tufts of scales, reminding one of *Thysanoscelis*, Wlsm. I have not observed this character in any other specimen of the same family from the West Indies. The genital segments of this specimen are given on Plate XLI. fig. 11. The uncus is double.

Exp. al. 22 millim.

ACROLOPHUS POEYI, sp. n. (Plate XLI. fig. 12.)

Antennæ, ♂, stout, simple, reaching to about two thirds the length of the wing ; ♀ somewhat more slender than in the ♂.

Palpi, ♂, long and recurved, not thickly clothed and not reaching so far as the back of the head ; umber-brown, tinged with whitish ochreous beneath : ♀, projecting, conical.

Head and thorax umber-brown.

Fore wings : ♂, umber-brown, with a few paler mottlings and specklings of brownish ochreous along the costal and dorsal margins and towards the apex, and with some small fuscous spots of scales scattered throughout the wing ; costal margin narrowly brownish ochreous throughout ; no particular pattern is visible on the wing, but there is a tendency in the distribution of the blackish scale-spots to form a sinuous dividing line along the fold, leaving the dorsal portion below it of the paler tint ; cilia brownish ochreous, with a dark line running through their middle : ♀ almost unicolorous pale umber-brown, having a less mottled or speckled appearance than the ♂.

Hind wings umber-brown, with cilia of the same colour.

Abdomen umber-brown. *Genital segments*, ♂ : uncus single, bent over at right angles ; lateral claspers slender and of almost even width throughout, rounded at the ends and not projecting beyond the uncus.

Legs greyish ; hind tarsal joints speckled alternately with umber-brown and subochreous ; hind tibiæ slightly hairy.

Exp. al. ♂ 10–12 millim., ♀ 11–18 millim.

Hab. West Indies—St. Vincent (windward side, 10 specimens, *Smith*).

Type, ♂ ♀.

I have named this species after the late Prof. Felipe Poey, the author of 'Centurie de Lépidoptères de l'île de Cuba' (Paris, 1833 *et seq.*), a book which I have in vain endeavoured to find in the market for many years.

ACROLOPHUS NIVEIPUNCTATA, sp. n.

Antennæ pale fawn.

Palpi reddish fawn mixed with rust-brown, which is especially noticeable on the exposed side; apical tuft long, almost entirely rust-brown.

Head and thorax reddish fawn mixed with rust-brown.

Fore wings pale reddish fawn, suffused with rust-brown over the greater portion of the wing-surface, except along the dorsal margin and about the apical margin and apex, the pale ground-colour appears also at the extreme base; the rust-brown shading projects into the paler colour, first in an angulated excrescence near the base, which crosses the fold, and secondly in a semicircular projection a little before the middle, which crosses the middle of the fold, from the outer and upper edge of this the rust-brown shading is deflected to the anal angle; a chain of about seven small fan-like, raised snow-white scales, commencing near the base, forms a straight margin to the upper edge of the first angular projection, reaching to the highest point of the pale ground-colour above the fold; a second chain of similar snow-white scales commences within the outer and upper portion of the semicircular projection, consisting of about nine raised dots, follows the edge of the dark shading about halfway along its deflection to the anal angle; the apical portion of the wing is slightly speckled with rust-brown, a few inconspicuous streaklets of the same colour occur near the apical margin and on the pale dorsal space; cilia mixed pale fawn and rust-brown. Underside greyish fuscous, tinged with rust-brown along the costal margin.

Hind wings stone-greyish; cilia scarcely paler. Underside dull greyish fuscous, slightly paler than in the fore wings.

Abdomen missing. (A female abdomen is stuck on to this specimen.)

Legs pale stone-grey, somewhat tinged with rufous beneath; hind tarsi not tufted above.

Exp. al. 31 millim.

Hab. West Indies—Cuba.

Type, ♂ Mus. Stgr.

ACROLOPHUS PLUMIFRONTELLUS, Clem.

Anaphora plumifrontella, Clem. Proc. Ac. Nat. Sc. Phil. xi. p. 261 (1859); Stn. Tin. N. Am. pp. 39, 57, 59, 60 (1872).

Acrolophus plumifrontellus, Wlsm. Tr. Ent. Soc. Lond. 1887,

pp. 149-50, pl. vii. fig. 5 ; Mschl. Ab. Senck. Nat. Ges. xv. pp. 336, 354 (1890).

United States—Pennsylvania, N. Carolina, Massachusetts, New York.

West Indies—Portorico (*Mschl.*), Cuba (*Wlsm.*).

ACROLOPHUS WALSINGHAMI, Mschl. (Plate XLI. fig. 13.)

Acrolophus walsinghami, Mschl. Ab. Senck. Nat. Ges. xv. pp. 335, 336, 354 (1890).

West Indies—Portorico (*Mschl.*).

A specimen in Dr. Staudinger's collection, also from Portorico, which appears to be this species, has the anal claspers slender, incurved, of almost even width throughout, very slightly widened and obliquely rounded upwards at the end ; uncus single.

ACROLOPHUS LEUCODOCIS, Z.

Anaphora leucodocis, Z. Hor. Soc. Ent. Ross. xiii. pp. 197-8 (1877) ; Wlsm. Tr. Ent. Soc. Lond. 1887, pp. 159-60.

? Brazil (Z.).

West Indies—Cuba (Z.).

I am indebted to Dr. Staudinger for the opportunity of examining Zeller's type, which is labelled "Brasil?" It is a very distinct species, having a pale line running to the end of the cell from the middle of the base, which is continued in three slender lines along the veins to the apical margin ; this is bordered on the upperside by a blackish line, which reaches beyond the end of the cell, and there are three lines of black atoms, the first beneath the costa to two thirds from the base, the second along the lower edge of the cell reaching to its end and sometimes continued downwards to the apical margin above the anal angle, the third is below the fold. I am unable to describe the genital segments, as the type, which is a male, has a female abdomen stuck on to it. Exp. al. 22 millim.

The antennæ are simple, and it should therefore be placed in the genus *Acrolophus*.

CÆNOGENES, Wlsm.

CÆNOGENES PUSILLA, Z.

Anaphora pusilla, Z. Hor. Soc. Ent. Ross. xiii. pp. 196-7 (1877) ; Wlsm. Tr. Ent. Soc. Lond. 1887, pp. 158-9, pl. viii. f. 13.

In my revision of the *Anaphorinæ* this species was retained by error in the genus *Anaphora*, Clem., whereas it should have been placed in *Cænogenes* ; this mistake was occasioned by my having failed to observe in my previous examination that veins 8 and 9 of the fore wings arise from a short common stem. The antennæ are pilose and serrate throughout on one side, but they differ slightly from those of the type of *Cænogenes*, which has them serrate on both sides.

Hab. Colombia—Barranquilla (*von Nolcken*).

West Indies—Dominica (*Druce*).

A single specimen, for which I am indebted to Mr. Druce, is undistinguishable from Zeller's type, but it is not in good condition.

CÆNOGENES? OCHRACEA, Mschl.

Cænogenes? ochracea, Mschl. Ab. Senck. Nat. Ges. xv. pp. 337, 354 (1890).

West Indies—Portorico (*Mschl.*).

ANAPHORA, Clem.

ANAPHORA POPEANELLA, Clem.

Anaphora popeanella, Clem. Proc. Ac. Nat. Sc. Phil. xi. p. 261 (1859); Stn. Tin. N. Am. pp. 57-8 (1872); Wlsm. Tr. Ent. Soc. Lond. 1887, pp. 161-3, pl. viii. f. 11; Mschl. Ab. Senck. Nat. Ges. xv. pp. 337, 354 (1890).

United States—Texas, Missouri, N. Carolina.

West Indies—Portorico (*Mschl.*).

I am somewhat doubtful whether Möschler was rightly acquainted with this species.

ANAPHORA ARCASALIS, Wkr.

Palthis? arcasalis, Wkr. Cat. Lp. Ins. B. M. xvi. pp. 153-4 (1858).

West Indies—San Domingo (*Wkr.*).

ANAPHORA MIMASALIS, Wkr.

Palthis? mimasalis, Wkr. Cat. Lp. Ins. B. M. xvi. p. 154 (1858).

West Indies—San Domingo (*Wkr.*).

ANAPHORA NOCTUINA, sp. n. (Plate XLI. fig. 14.)

Antennæ bone-ochreous.

Palpi, *head*, and *thorax* pale fawn, much mixed with purplish grey and fuscous.

Fore wings pale fawn, almost entirely suffused with purplish fuscous, the ground-colour showing chiefly along the fold, and on and beyond the end of the cell and about the apex; two slender angulated blackish marks on the fold, the outer one enclosing a reddish-brown spot; another reddish-brown spot lies above and between these two, about the middle of the cell, and this is externally margined with blackish; a few reddish-brown scales at the end of the cell intermixed with blackish, the same mixture being continued in a rather diffused curved line downwards towards the anal angle as far as vein 4, and thence upwards and outwards towards the apex, forming the lower margin of a space of the pale ground-colour; cilia purplish grey, mottled with pale fawn.

Hind wings pale fawn, faintly shaded with brownish; cilia pale fawn.

Abdomen pale fawn; lateral claspers shaped somewhat as in a

marrow-spoon, elongate, scarcely spatulate, with almost parallel margins, rounded at the ends; uncus double.

Legs pale fawn; hind tarsi faintly spotted.

Exp. al. $30\frac{1}{2}$ millim.

Hab. West Indies—Cuba.

Type, ♂ Mus. Stgr.

I have adopted the specific name from a label placed by Zeller on Dr. Staudinger's specimen.

FELDERIA, Wlsm.

FELDERIA DIMIDIELLA, sp. n. (Plate XLI. fig. 15.)

Antennæ pale fawn-ochreous.

Palpi umber-brown at the base, pale fawn-ochreous beyond.

Head and *thorax* pale fawn-brown.

Fore wings pale fawn, sprinkled, speckled, and shaded with brownish scales; a series of dark umber-brown spots—the first small, a little below the costal margin near the base; the second larger, on the fold before the middle; the third also large, on the fold beyond the middle; the fourth at the end of the discal cell, a slight indication of a fifth spot lying parallel with the middle of the apical margin; cilia very pale fawn.

Hind wings dingy whitish fawn; cilia scarcely paler.

Abdomen dingy whitish fawn.

Legs whitish fawn; tarsi unspotted.

Exp. al. 20 millim.

Hab. West Indies—Cuba.

Type, ♂ Mus. Stgr.

The pectinations of the antennæ are much shorter than in *Felderia doeri*, Wlsm., the type of the genus. This specimen is labelled in Zeller's handwriting "*Acrolophus vitellus* nicht beschr." It cannot be *vitellus*, Poey, as the antennæ of that species are described as simple.

BAZIRA, Wkr.

Bazira, Wkr. Cat. Lp. Ins. B. M. xxx. p. 1009 (1864).

= *§Eddara*, Wkr. Cat. Lp. Ins. B. M. xxviii. pp. 517–8 (1863).

BAZIRA XYLINELLA, Wkr.

Eddara xylinella, Wkr. Cat. Lp. Ins. B. M. xxviii. p. 518 (1863).

Bazira xylinella, Wkr. Cat. Lp. Ins. B. M. xxx. p. 1009 (1864).

West Indies—Jamaica (*Wkr.*).

The type of this species is erroneously recorded by Walker as a male; it is a female. In the absence of the male, it is impossible to say whether this genus can be regarded as distinct. The palpi are short and porrect; the fore wings have 12 veins, all separate, and the hind wings 8 veins, all separate. I am inclined to think it is allied to *Pseudanaphora arcanelle*, Clem.

EUPLOCAMINÆ.

AMYDRIA, Clem.

AMYDRIA ANAPHORELLA, sp. n.

Antennæ, ♂, simple, basal joint somewhat enlarged; brownish.

Palpi erect, second joint roughly clothed beneath; apical joint less than half the length of the second joint; brownish ochreous, tinged with brown externally on the second joint.

Head brownish ochreous.

Thorax greyish fuscous.

Fore wings greyish fuscous, with a slight bluish tinge, speckled with a reduplicated line of darker spots along the basal half of the costal margin, and three or four spots on the margin beyond the middle; a quadrate chocolate-brown patch at the end of the cell is preceded by a paler reddish-brown elongate spot, and followed by a brownish-ochreous space extending to the apex; a second elongate chocolate-brown patch on and above the outer half of the fold is also preceded by a shorter elongate reddish-brown spot, of which equal parts are on the upper and under side of the fold; cilia brownish ochreous, shaded with greyish fuscous.

Hind wings brownish grey; cilia slightly paler.

Abdomen brownish grey.

Legs greyish cinereous, tarsal joints faintly pale-spotted.

Exp. al. 22 millim.

Hab. West Indies—St. Vincent (windward side, 1 specimen, Smith).

Type, ♂.

This species has the same neuration as Clemens' genus *Amydria*, all the veins in both fore and hind wings being separate: the apical joint of the palpi is not tufted as in *Pseudanophora*, Wlsm., nor recurved as in *Anaphora*, Clem.; it is, however, more erect than in *effrenatella*, Clem., the type of *Amydria*, and appears to form a connecting-link between this genus and *Pseudanaphora*.

MYRMECOZELA, Z.

MYRMECOZELA OCHRACELLA.

Tinea ochraceella, Tengstr. Not. Sällsk. Faun. et Flor. Fenn. För. ii. p. 111 (1847).

Myrmecozela ochraceella, Z. Lin. Ent. vi. pp. 176-7 (1852); Stgr. & Wk. Cat. Lp. Eur. (ii.) no. 1435, p. 271 (1871); Mschl. Ab. Senck. Nat. Ges. xv. pp. 339, 354 (1890).

Europe.

West Indies—Portorico (Mschl.).

TIQUADRA, Wkr.

Tiquadra, Wkr. Cat. Lp. Ins. B. M. xxviii. p. 519 (1863); type *Tiquadra inscitella*, Wkr. (Mexico).

= *Oscella*, Wkr. Cat. Lp. Ins. B. M. xxix. pp. 783-4 (1864); type *Oscella cæneonivella*, Wkr. (Venezuela).

= *Manchana*, Wkr. Cat. Lp. Ins. B. M. xxxv. p. 1818 (1866); type *Manchana avitella*, Wkr. (Santa Martha).

= *Acureuta*, Z. Hor. Soc. Ent. Ross. xiii. pp. 198-9 (1877); type *Acureuta aspera*, Z. (Colombia).

TIQUADRA ASPERA, Z.

Acureuta aspera, Z. Hor. Soc. Ent. Ross. xiii. pp. 199-201 (1877).

Tiquadra aspera, Mschl. Ab. Senck. Nat. Ges. xv. pp. 339, 354 (1890).

Colombia.

West Indies—Portorico (*Mschl.*).

TIQUADRA LENTIGINOSA, Z.

Acureuta lentiginosa, Z. Hor. Soc. Ent. Ross. xiii. pp. 201-2 (1877).

Brazil, Peru.

West Indies—Trinidad (Port of Spain: *Wlsm.*).

I have a single female from Trinidad, for which I am indebted to Mr. J. H. Hart; this agrees with specimens of the same sex from Petropolis (Brazil), which I am unable to separate from *Acureuta lentiginosa*, Z. The males have the hind wing somewhat more ochreous than in the female and the fore wings less profusely spotted, but the amount of grey scaling on their surface is somewhat variable.

TIQUADRA ? sp.

West Indies—Dominica.

A single specimen received from Mr. Druce, collected in Dominica, is of a much darker colour and smaller size; moreover there is a conspicuous difference in the neuration of the fore wings, which have veins 3 and 4 arising from a short stalk. It may possibly constitute a new genus; but the specimen is a female, and in such poor condition that it cannot be usefully described.

PEXICNEMIDIA, Mschl.

PEXICNEMIDIA MIRELLA, Mschl.

Pexicnemidia mirella, Mschl. Ab. Senck. Nat. Ges. xv. pp. 338, 354 (1890).

West Indies—Portorico (*Mschl.*).

PLUTELLINÆ.

PLUTELLA, Schrk.

PLUTELLA CRUCIFERARUM, Z.

Plutella cruciferarum, Z. Stett. Ent. Zeit. 1843, p. 281; Stgr. & Wk. Cat. Lp. Eur. (ii.) no. 1626, pp. 281, 425 (1871).

= *Plutella xylostella*, Mschl. Ab. Senck. Nat. Ges. xv. pp. 341, 354 (1890).

Europe, Asia, Africa, North America, South America, Australia.
West Indies—Portorico (*Mschl.*).

GELECHIANÆ.

GELECHIA, Z.

GELECHIA DONATELLA, Wkr.

Gelechia donatella, Wkr. Cat. Lp. Ins. B. M. xxix. pp. 596–7 (1864).

West Indies—Jamaica (*Wkr.*).

GELECHIA ROBUSTELLA, Wkr.

Gelechia robustella, Wkr. Cat. Lp. Ins. B. M. xxix. p. 597 (1864).

West Indies—San Domingo (*Wkr.*)

GELECHIA ATTENUATELLA, Wkr.

Gelechia attenuatella, Wkr. Cat. Lp. Ins. B. M. xxx. p. 1019 (1864).

West Indies—Jamaica (*Wkr.*).

GELECHIA EXCLARELLA, Mschl.

Gelechia exclarella, Mschl. Ab. Senck. Nat. Ges. xv. pp. 343–4, 354 (1890).

Surinam (*Mschl.*).

West Indies—Portorico (*Mschl.*).

GELECHIA COSTIPUNCTELLA, Mschl.

Gelechia costipunctella, Mschl. Ab. Senck. Nat. Ges. xv. pp. 344, 534 (1890).

West Indies—Portorico (*Mschl.*).

GELECHIA RIVULELLA, Mschl.

Gelechia rivulella, Mschl. Ab. Senck. Nat. Ges. xv. pp. 344, 354 (1890).

West Indies—Portorico (*Mschl.*).

GELECHIA CINEROCERVINA, sp. n.

Antennæ pale greyish fawn.

Palpi with projecting scales above towards the apex of the second joint, apical joint about equal in length to the second, slender and slightly recurved; pale greyish fawn, darkened externally on the second joint.

Head pale greyish fawn; face paler.

Thorax pale greyish fawn.

Fore wings with 12 veins; 7 and 8 from a point, running to the costa; dull greyish fawn, with a small fuscous spot on the middle,

followed by another at the end of the cell, slightly preceded by one below it on the fold; an elongate narrow fuscous shade along the costal margin beyond the middle and four fuscous dots around the apex—two on the costal and two on the apical margin; cilia dull greyish fawn.

Hind wings with 8 veins: 3 and 4 from a point; 6 and 7 from a point; cell closed; trapezoidal, with a very oblique and scarcely indented apical margin; grey with grey cilia.

Abdomen and legs grey.

Expl. al. 8 millim.

Hab. West Indies—St. Vincent (windward side, 2 specimens, *Smith*).

Type, ♂.

GELECHIA, sp., Snell.

Gelechia, sp., Snell. Tijds. v. Ent. xxx. p. 66 (1887).

West Indies—Curaçao (*Snell.*).

GELECHIA ? sp., Snell.

Gelechia ? sp., Snell. Tijds. v. Ent. xxx. p. 66 (1887).

West Indies—Curaçao (*Snell.*).

BRYOTROPHA, Hein.

BRYOTROPHA TRANSLUCIDA, sp. n.

Antennæ pale cinereous, faintly speckled with fuscous.

Palpi cinereous; apical joint speckled with fuscous.

Head cinereous.

Thorax cinereous, with a slight ochreous tinge.

Fore wings deep brownish fuscous, the extreme base subochreous; with a broad oblique fascia across the middle of the wing, subochreous mottled with brownish; a few subochreous spots about the costal and dorsal margins before the apex; cilia greyish.

Hind wings semitransparent, iridescent greyish; cilia grey.

Abdomen greyish fuscous, faintly barred with paler colour.

Legs pale greyish ochreous.

Exp. al. 12–14 millim.

Hab. West Indies—St. Vincent (windward side, 3 specimens, *Smith*); Dominica (1 specimen, *Druce*).

Type, ♀.

BRYOTROPHA, sp. ?

West Indies—St. Vincent (1 specimen, *Smith*).

Allied to *translucida*, but in too poor condition to be described.

LITA, Tr.

LITA CROCIPUNCTELLA, sp. n.

Antennæ dark umber, very faintly annulated.

Palpi dark umber, with the apex of the second joint and the

extreme apex of the apical joint whitish ochreous, a few whitish-ochreous scales interspersed at the sides.

Head dark umber-brown, mixed with a few hoary scales.

Thorax dark umber, sprinkled with hoary scales and fringed with hoary scales posteriorly.

Fore wings dark umber, irrorated with pale ochreous scales and sprinkled with orange-yellow spots, some of which are faintly margined with raised blackish scales; the arrangement of the spots is somewhat as follows:—one at the base below the costal margin; two on the fold, each followed by black scales; one on the middle of the wing and one beyond it towards the end of the cell, brighter and more conspicuous and followed by raised blackish scales; at one fourth from the apex, a large orange-yellow spot on the costal and an opposite one on the dorsal margin, with one small spot at the extreme apex; cilia dark umber-grey on the dorsal margin.

Hind wings brownish grey; cilia greyish.

Abdomen dark umber; anal tuft bright ochreous.

Legs very pale greyish ochreous, barred and banded with brownish fuscous.

Exp. al. 12 millim.

Hab. West Indies—St. Vincent (windward side, 1 specimen, *Smith*).

Type, ♀.

PÆCILIA, Hein.

PÆCILIA EXTRANEA, sp. n.

Antennæ [broken], a black line along each side of the basal joint, which is otherwise white.

Palpi with long projecting divided scales beneath the second joint, whitish on the inner side, streaked with brown and chestnut on the outer side; apical joint distinctly barred with black near the base and towards the apex.

Head and *face* white.

Thorax cinereous, mottled with brownish fuscous at the sides and posteriorly.

Fore wings brownish fuscous at the base for one third their length, cinereous speckled with brownish fuscous beyond, much shaded with brownish fuscous on the apical fourth; a slender white line commencing at the base and following the costal margin is bent downwards and forms a sinuous outer edge to the basal patch, reaching the dorsal margin obliquely before the middle; another slender white line commencing below the middle of the costa is sinuated outwards and downwards to the anterior edge of the dark apical fourth, where it meets a shorter, slender white line, which reverts obliquely to the dorsal margin; along the extreme apical margin is a narrow whitish line enclosing a short series of black dots; cilia pale cinereous, with a reduplicated darker line running through them, cilia on the dorsal margin grey.

Hind wings grey; cilia grey.

Abdomen greyish.

Legs very pale cinereous; hind tibiæ very pale cinereous, shaded with brownish fuscous externally; posterior tarsal joints fuscous, dotted with white; spurs pale cinereous; the middle pair of legs are blackish, with slender white oblique lines on their outer sides.

Exp. al. 10 millim.

Hab. West Indies—St. Vincent (May, 1 specimen, *Smith*).

Type, ♂.

DIDACTYLOTA, nom. n.

(*dis*=twice; *δακτυλωτός*=fingered.)

= § *Dactylota*, Snell. Tijds. v. Ent. xix. pp. 23-7 (1876).

Type, ♂ ♀ *Dactylota kinkerella*, Snell.

The name *Dactylota*, given by Snellen to this genus, being pre-occupied by Brandt in the Echinodermata (1835), I have thought it desirable to change it to *Didactylota*, a name which if read in a certain sense is sufficient to indicate its origin, but which equally applies to the structure of the genus.

DIDACTYLOTA BICOLOR, sp. n.

Antennæ pale fawn.

Palpi very pale fawn.

Head and *thorax* rich fawn-brown.

Fore wings rich fawn-brown to very near the middle, beyond fuscous speckled with pale cinereous; the margin of the two colours is straight and distinct across the wing, but with no dividing-line; cilia pale cinereous, with a line of fuscous scales along their middle.

Hind wings pale greyish fuscous; cilia long, purplish grey.

Abdomen fuscous, pale cinereous beneath; the protruding anal claspers white.

Legs pale cinereous, with long greyish hairs on the hind tibiæ above, projecting over the spurs; hind tarsal joints barred with fuscous.

Exp. al. $7\frac{1}{2}$ millim.

Hab. West Indies—St. Vincent (windward side, 1 specimen, *Smith*).

Type, ♂.

This is the third species of the genus now known. The hind wings distinctly divided to one fourth into two separate lobes, seems to justify its position. In a single specimen I am unable to examine critically the neuration, but it appears to be in all respects similar to *kinkerella*; the wings, however, owing to their very long and closely packed cilia, have a squarer appearance, which makes them look wider in proportion to their length; this, however, is not the case when the shape of the wing itself is examined. In this and the American species (*snellenella*, Wlsm.) the second lobe of the hind wings is somewhat more decidedly developed than in the European type.

TACHYPTILIA, Hein.

TACHYPTILIA DESECTELLA, Z.

Gelechia (Tachyptilia) desectella, Z. Hor. Soc. Ent. Ross. xiii. pp. 362-3, pl. v. fig. 122 (1877).

West Indies—Cuba (Z.).

HELCASTOGRAMMA, Z.

HELCASTOGRAMMA OBSERATELLA, Z.

Gelechia (Helcystogramma) obseratella, Z. Hor. Soc. Ent. Ross. xiii. pp. 371-3, pl. v. fig. 127 (1877).

West Indies—Cuba (Z.).

TRICHOTAPHE, Clem.

TRICHOTAPHE TRIGONELLA, sp. n.

Antennæ brownish fuscous, faintly annulated with paler rings.

Palpi pale whitish ochreous, the extreme point of the apical joint ochreous, with a few fuscous scales preceding it.

Head leaden grey.

Thorax greyish brown, with a distinct whitish-ochreous line from the eyes to the middle of the posterior margin on each side, forming a V-shaped mark, which gives it a triangular appearance.

Fore wings greyish brown, with a small ferruginous spot at the end of the discal cell, margined on its upper and outer side with whitish-ochreous scales; a whitish-ochreous line from the base along the dorsal margin to the bulge of the wing, but not continued where the margin becomes straight; a faint whitish-ochreous spot or group of scales on the extreme costal margin at one fifth from the apex; cilia brownish grey, with a few detached whitish-ochreous scales along their apical margin.

Hind wings brownish grey, with a tuft of greyish-ochreous hairs above at the base; cilia brownish grey, inclining to ochreous at their extreme base.

Abdomen greyish brown; anal tuft whitish ochreous.

Legs whitish ochreous; hind tibiæ lightly touched with brownish grey above the spurs and on the tarsal joints.

Exp. al. 11 millim.

Hab. West Indies—St. Vincent (windward side, 1 specimen, Smith).

Type, ♂.

BRACHYXROSSATA, Hein.

BRACHYXROSSATA PSORICOPTERELLA, sp. n.

Antennæ fuscous, faintly annulated with pale cinereous.

Palpi fuscous, speckled with pale cinereous at the ends of the second and apical joints.

Head greyish fuscous above, face paler.

Thorax fuscous.

Fore wings mottled with pale cinereous and fuscous in about equal proportions; the latter predominating along the dorsal half to the

anal angle and in two costal patches, the first scarcely before, the other beyond the middle; there is also a fuscous streak from the costa near the base, and a fuscous spot at the extreme apex followed by a fuscous line around the apical margin but not reaching to the anal angle; cilia reddish grey, inclining to pale ochreous grey on their basal half, especially towards the costal margin. In some specimens the pale ground-colour is equally distributed over the dorsal half of the wing.

Hind wings dark greyish; cilia grey.

Abdomen fuscous, anal tuft paler; underside shining pale cinereous.

Legs: hind legs fuscous, tibiae clothed above with longish hairs, tarsal joints speckled with very pale ochreous; middle pair of legs conspicuously banded on their outer sides with fuscous and very pale ochreous.

Expl. al. 10 millim.

Hab. West Indies—St. Vincent (windward side, 5 specimens, May, *Smith*).

Type, ♂.

DIASTOMA, Mschl.

DIASTOMA SQUAMOSA, sp. n.

Antennæ, ♂, strongly ciliated; very pale brownish.

Palpi whitish, with an umber-brown streak at the base on the underside.

Head dirty whitish.

Thorax whitish, with a slight umber-brown tint anteriorly.

Fore wings white, faintly speckled with pale umber-brown; with three dark brown costal marks containing some blackish scales:—the first at one fourth from the base, giving rise to a very inconspicuous sinuate and outwardly oblique line of brownish scales, some of which are raised; the second at about the middle of the wing, also gives rise to an outwardly oblique line of brown scales containing raised blackish tufts, this is developed into a conspicuous spot at the end of the cell, and beneath it nearer to the base is a much smaller spot of similar raised scales, this line is not continued to the dorsal margin; from the third costal spot, which is at three fourths of the wing-length, a more continuous but slender line of mixed brown and black scales, some slightly raised, curves outwards above the middle of the wing and is bent back to the anal angle; beyond it, but below the middle of the apical margin, is a spot of similar colour, above which are a few scattered brownish scales along the margin; cilia whitish, their base indicated by a very faint marginal line.

Hind wings yellowish white, with cilia of the same colour.

Abdomen very pale ochreous, with two yellowish-white tufts arising right and left at its junction with the thorax.

Legs yellowish white.

Exp. al. 19 millim.

Hab. West Indies—St. Vincent (1 specimen, *Smith*).

Type, ♂.

POLYHYMNO, Chamb.

POLYHYMNO? GODMANI, sp. n.

Antennæ with the basal joint slightly enlarged; pale grey.

Palpi shining pale grey.

Head shining pale grey; face almost white.

Thorax shining pale grey.

Fore wings shining pale reddish grey, without markings to beyond the middle; the apical portion of the wing adorned, first by a bright orange-yellow streak slightly above the middle of the wing extending to the costal margin before the apex as far as a small jet-black apical spot, from which two slender dark lines (which appear to be produced by the iridescent effect of the waved lines of scales rather than by any dark scaling) diverge downwards to the anal angle, these are preceded by a bright silvery-white space which runs obliquely backwards (and appears to be also dark-margined), and followed by the shining lilac metallic cilia, which are gathered into two distinct depressed points at the apex, giving the wing a falcate appearance; the cilia of the dorsal margin and anal angle are reddish grey.

Hind wings shining pale grey; cilia purplish grey, with a distinct black transverse line preceded by a pale space at the extreme apex.

Abdomen shining leaden grey.

Legs very pale ochreous, with a black spot above the spurs; hind tibiæ clothed with long hairs above; hind tarsal joints barred with blackish scales above.

Exp. al. 11 millim.

Hab. West Indies—St. Vincent (Kingstown and windward side, 5 specimens, *Smith*).

Type, ♂.

Additional material should enable this species to be ultimately separated from the genus *Polyhymno*; it agrees in structure with my African *Polyhymno* ? *tenuis* and also with Walker's *Gelechia animosella* from India.

YPSOLOPHUS, F.

YPSOLOPHUS MANELLUS, Mschl.

Ypsolophus manellus, Mschl. Ab. Senck. Nat. Ges. xv. pp. 344-5, 354 (1890).

West Indies—Portorico (*Mschl.*).

YPSOLOPHUS RUSTICUS, sp. n.

Antennæ pale greyish ochreous.

Palpi with a strong triangular tuft, from the middle of which arises the sharp, slender, apical joint; cinereous at the sides, with a paler line along the margin of the tuft.

Head pale greyish ochreous.

Thorax pale ochreous.

Fore wings pale ochreous, with a small fuscous spot at the extreme base of the costal margin and a black discal dot at half the wing-length, followed by a second at two thirds from the base, somewhat nearer the dorsal margin, beneath it is a group of brownish-fuscous scales; one or more groups of fuscous scales on the costal margin before the apex, and a diffused shade of the same colour along the apical margin tapering to the anal angle; cilia pale ochreous.

Hind wings pale greyish with a slight iridescence; cilia pale cinereous.

Abdomen greyish; anal tuft inclining to ochreous.

Legs very pale cinereous.

Exp. al. 12 millim.

Hab. West Indies—St. Vincent (windward side, 2 specimens, *Smith*). United States—Texas (*Belfrage*).

Type, ♂.

I have two specimens collected by the late G. W. Belfrage in Texas, which have been long in my collection as belonging to an undescribed species, but under the suspicion that they might be *Anarsia trimaculella*, Chamb., from which they appear to differ in the absence of a third spot on the fold before the middle.

YPSOLOPHUS PIPERATUS, sp. n.

Antennæ pale cinereous.

Palpi fuscous externally, paler on their inner sides, with a narrow whitish line along the outer margin of the tuft.

Head pale cinereous.

Thorax pale ochreous.

Fore wings pale ochreous, dusted with black scales, especially on the outer half; costa black at the base, dotted unequally with black throughout; apical margin dusted with black; a black discal spot at one fourth from the base above the fold; a second smaller one below it; two black dots towards the end of the cell, the first of which is at about the middle of the wing, the second beyond the middle, below the first of these spots is a small black dot; cilia very pale ochreous.

Hind wings grey with a faint iridescence; cilia pale cinereous.

Abdomen grey.

Legs pale cinereous.

Exp. al. 9 millim.

Hab. West Indies—St. Vincent (windward side, one specimen, *Smith*).

Type, ♂.

YPSOLOPHUS INDIGNUS, sp. n.

Antennæ pale cinereous, faintly annulated.

Palpi rufo-cinereous, with a pale line along the upper margin of the second joint.

Head and thorax pale rufo-cinereous.

Fore wings pale rufo-cinereous, with a few chestnut mottlings in

some specimens; a blackish discal spot before the middle, another on the fold almost exactly below it, but perhaps a little further removed from the base; a pair of very inconspicuous chestnut-brown spots on each side of the fold near the base, the lower preceding the upper, and another pair at about the end of the cell, sometimes fused into one spot but not conspicuous; a series of five small black triangular dots—three on the apical margin, one on the apex, and one above it; cilia pale rufo-cinereous.

Hind wings reddish grey; cilia grey.

Abdomen greyish; anal tuft slightly paler.

Legs pale cinereous; tarsal joints faintly spotted.

Exp. al. 11 millim.

Hab. West Indies—St. Vincent (Kingstown and windward side, 6 specimens, *Smith*).

Type, ♂.

This appears to be a variable species. The spots are almost obsolete in some specimens, which then appear almost uniform. It is closely allied to *Y. pauciguttellus*, Clem., but is scarcely more than half the size, the hind wings are also somewhat less transparent.

ÆCOPHORINÆ.

PSECADIA, Hb.

N. Syn. = *Tamarrha*, Wkr. Cat. Lp. Ins. B. M. xxix. p. 816 (1864).

PSECADIA CONFUSELLA, Wkr.

Hyponomeuta confusellus, Wkr. Cat. Lp. Ins. B. M. xxviii. p. 531 (1863).

N. syn. = *Cryptolechia strigosella*, Wkr. Cat. Lp. Ins. B. M. xxix. p. 710 (1864).

Psecadia (Cryptolechia) strigosa, Ckrl. Jr. Inst. Jamaica, i. 33 (1891).

West Indies—Jamaica (*Wlsm.*), San Domingo (*Wkr.*), Dominica (*Wlsm.*).

Colombia—Bogotá (*Wlsm.*).

This species, which was placed in the genera *Hyponomeuta* and *Cryptolechia* by Walker, should be removed to *Psecadia*. I have specimens from Dominica and Bogotá received from Mr. Druce.

PSECADIA INGRICELLA, Mschl.

Psecadia ingricella, Mschl. Ab. Senck. Nat. Ges. xv. pp. 343, 354 (pl.), fig. 19 (1890).

West Indies—Portorico (*Mschl.*), Jamaica (*Wlsm.*).

PSECADIA PAUCELLA, Wkr.

Hyponomeuta paucellus, Wkr. Cat. Lp. Ins. B. M. xxviii. pp. 530–1 (1863).

West Indies—San Domingo (*Wkr.*).

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PSECADIA NOTATELLA, Wkr.

Psecadia notatella, Wkr. Cat. Lp. Ins. B. M. xxviii. p. 536 (1863).

N. syn. = *Psecadia xanthorrhoea*, Z. Hor. Soc. Ent. Ross. xiii. pp. 234-6, pl. iii. fig. 71 (1877); Snell. Tijd. v. Ent. xxx. p. 65 (1887); Mschl. Ab. Senck. Nat. Ges. xv. pp. 341, 354 (1890).

West Indies—San Domingo (*Wkr.*), Portorico (*Z.*), Curagao (*Snell.*).

PSECADIA ABRAXASELLA, Wkr.

Psecadia abraxasella, Wkr. Cat. Lp. Ins. B. M. xxx. pp. 1016-17 (1864).

N. syn. = *Psecadia aureoapicella*, Mschl. Ab. Senck. Nat. Ges. xv. pp. 341-2, 354 (1890).

West Indies—San Domingo (*Wkr.*), Portorico (*Mschl.*), Jamaica (*Wlsm.*).

PSECADIA ADUSTELLA, Z.

Psecadia adustella, Z. Hor. Soc. Ent. Ross. xiii. pp. 240-1 (1877).

West Indies—Portorico (*Z.*).

PSECADIA EXORNATA, Z.

Psecadia exornata, Z. Hor. Soc. Ent. Ross. xiii. pp. 238-240, pl. iii. fig. 73 (1877).

Peru—Chauchamayo (*Z.*).

West Indies—Cuba (*Z.*).

PSECADIA KIRBYI, Mschl.

Psecadia kirbyi, Mschl. Ab. Senck. Nat. Ges. xv. pp. 342-3, 354 (1890).

West Indies—Portorico (*Mschl.*).

PSECADIA GELIDELLA, Wkr.

Tamarrha gelidella, Wkr. Cat. Lp. Ins. B. M. xxix. p. 817 (1864).

West Indies—Jamaica (*Wkr.*).

PSECADIA NIVOSELLA, Wkr.

Tamarrha nivosella, Wkr. Cat. Lp. Ins. B. M. xxix. p. 817 (1864).

West Indies—Jamaica (*Wkr.*), San Domingo (*Wkr.*).

ATYCHIANÆ.

TORTYRA, Wkr.

Tortyra, Wkr. Cat. Lp. Ins. B. M. xxviii. p. 510 (1863).

N. syn. = *Choregia* (*Z.*), F. & R. Reise Nov., Lp. expl. pl. cxl. (1875); Z. Hor. Soc. Ent. Ross. xiii. pp. 191-2 (1877).

TORTYRA AURIFERALIS, Wkr.

Tortyra auriferalis, Wkr. Cat. Lp. Ins. B. M. xxviii. pp. 510-511 (1863).

N. syn. = *Simæthis aurofasciana*, Snell. Tijd. v. Ent. xviii. pp. 73, 74-76, pl. vi. fig. 7 (1875); Mschl. Ab. Senck. Nat. Ges. xv. pp. 335, 354 (1890).

Simæthis (Chordates) aurofasciana, Snell. Tijd. v. Ent. xx. pp. 48-49 (1876).

Choregia aurofasciana, Snell. Tijd. v. Ent. xxviii. p. 15 (1885).

N. syn. = *Choregia ignita*, Z. Hor. Soc. Ent. Ross. xiii. pp. 195-6 (1877).

West Indies—San Domingo (*Wkr.*), St. Martin (*Snell.*), Cuba (*Z.*), Portorico (*Mschl.*), St. Vincent (windward side, sea-level, 2 specimens, *Smith*).

It is, I think, more than probable that *Tortyra spectabilis*, *Wkr.* (Brazil), and *Choregia fulgens*, F. & R. (Colombia), are also varieties of this species; indeed, Zeller indicates the same opinion in naming *Choregia ignita* under his remarks on *Choregia fulgens*, and not under a separate heading. The differences appear to be the generally brighter colouring of the thorax and fore wings, and the small longitudinal black streaks running towards the apex of the wing in the West-Indian form.

GAURIS, Hb.

GAURIS BIFERANA, *Wkr.*

Gauris biferana, *Wkr.* Cat. Lp. Ins. B. M. xxviii. p. 418 (1863).

West Indies—San Domingo (*Wkr.*).

GAURIS RIMULALIS, *Z.*

Simæthis rimulalis, *Z.* Ver. z.-b. Ges. Wien, xxv. p. 321 (1875); Hor. Soc. Ent. Ross. xiii. pp. 174-5, pl. ii. fig. 62 (1877).

West Indies—St. Thomas (*Z.*), Cuba (*Z.*).

CHOREUTINÆ.

BRENTHIA, Clem.

BRENTHIA PAVONACELLA, Clem.

Brenthia pavonacella, Clem. Proc. Ac. Nat. Sc. Phil. xii. p. 172 (1860); Stn. Tin. N. Am. pp. 38, 41, 134-5 (1872); Mschl. Ab. Senck. Nat. Ges. xv. pp. 335, 354 (1890).

United States, Central America, Brazil.

West Indies—Portorico (*Mschl.*).

GLYPHIPTERYGINÆ.

TRAPEZIOPHORA, gen. nov.

(τράπεζιον = an irregular four-sided figure; φορεῖν = to bear.)

Type, ♂ ♀ *Trapeziophora gemmula*, *Wlsm.*

Antennæ about half the length of the fore wings; simple in both sexes.

Maxillary palpi obsolete.

Labial palpi short, projecting, scarcely recurved; apical joint longer than the second joint.

Haustellum moderate.

Head smooth.

Thorax stout.

Fore wings elongate, subovate, costa somewhat arched beyond the middle, apex rounded, apical margin oblique, rounded. *Neuration*: 12 veins, all separate; 7 and 8 closely approximate at their base; 9 remote from 8; 10 very near 9, and approaching it even more closely where it reaches the costal margin.

Hind wings trapezoidal, of even width throughout, dorsal margin slightly concave, apex rounded, apical margin convex. *Neuration*: 8 veins; 3 and 4 from a point; 6 and 7 separate, but approximate towards their base.

Abdomen somewhat stout.

Legs smooth, spurs unequal.

This genus differs from the ordinary forms of the *Glyphipteryginae* in having smooth (not hairy) legs, and in the form of the hind wings, which is trapezoidal, but in other respects it appears to fall into the neighbourhood of *Aelocosma*, Meyr.

TRAPEZIOPHORA GEMMULA, sp. n. (Plate XLI. fig. 7, a-b.)

Antennae fuscous.

Palpi whitish, doubly barred with black across the second joint and with a black longitudinal line throughout the length of the apical joint beneath.

Head purplish fuscous.

Thorax greyish fuscous.

Fore wings greyish fuscous at the base, blending into bright purple on the apical half of the wing; the basal half irrorated with small whitish shining dots, which run in a series of confused lines, radiating outwards from the base to the middle of the wing; a few similar dots, but of a rather yellower colour, are visible about the middle of the bright purple apical half of the wing; upon this outer half are four distinct shining iridescent metallic bands, with a lilac or green reflexion—the first commencing on the costa, just beyond the middle of the wing, is widened and diffused downwards, but not reaching to the lower margin of the cell; the second is shorter, with a slightly oblique outward direction, and is more remote from the first than are the two beyond it from itself or each other; the third band, commencing on the costa and curving obliquely outwards, is recurved below the middle to the anal angle; beyond it a short fourth band crosses before the apex from the costa to the middle of the apical margin; cilia greyish about the apex, tending to purplish grey about the anal angle. Underside unicolorous purplish fuscous.

Hind wings brown; cilia greyish brown. Underside greyish brown, with three bright metallic transverse streaks near the apex.

Abdomen greyish fuscous; dingy whitish beneath.

Legs banded with black and white.

Exp. al. 11 millim.

Hab. West Indies—St. Vincent (windward side, 2 specimens, *Smith*).

Type, ♂ ♀.

XYLORYCTINÆ.

GLYPHIDOCERA, gen. n.

(*γλῦψις*=a notch, *κέρας*=a horn.)

Type, ♂ ♀ *Glyphidocera audax*, Wlsm.

Antennæ: male, slightly serrate, deeply notched on the upperside a little beyond the basal joint; female, simple, having no notch, but the outer end of the basal joint is somewhat enlarged.

Maxillary palpi obsolete.

Labial palpi long, recurved, clothed with closely appressed scales; apical joint acuminate, rather more than half the length of the second joint.

Head densely clothed above; face smooth.

Thorax smooth.

Fore wings narrow, elongate, depressed, and rounded at the apex, slightly arched at the extreme base of the costa, costal and dorsal margins parallel, anal angle rounded. *Neuration*: 11 veins: 2 and 3 from a recurved common stem; 7 closely approximate to 8 at base, running to apical margin below apex, 8 to costal margin.

Hind wings more than twice the breadth of the fore wings, slightly rounded at the apex, outer margin evenly rounded to the abdominal angle; cilia short and even. *Neuration*: 8 veins; 3 and 4 from a short common stem; 5 straight, moderately remote from origin of 3+4; 6 and 7 from a common stem; 8 joined to upper margin of cell by a cross vein.

Legs: posterior pair with unequal spurs; tibiæ moderately clothed.

It seems at present impossible to arrive at the affinities of this genus; the notched antennæ would suggest *Blastobasis*, Z., and *Holcocera*, Clem., from which it differs widely in neuration and the shape of the hind wings. Its neuration conforms to the *Xyloryctidæ*, Meyr., from which it is separated by the absence of a tuft of hair-like scales near the base of the hind wings; nevertheless it will be excusable perhaps to place it in this family, at least provisionally.

GLYPHIDOCERA AUDAX, sp. n. (Plate XLI. fig. 8, a-c.)

Antennæ subochreous.

Palpi fawn-brown, dusted with fuscous.

Head and *thorax* fawn-brown.

Fore wings dull fawn-brown, densely irrorated with fuscous scales throughout; with an elongate transverse fuscous spot before the middle, of which the lower extremity touches the fold; a smaller fuscous spot at the end of the cell; a few fuscous scales about the apical margin indicate the extremities of the veins; cilia pale fawn-brown, with a darker line along their middle.

Hind wings cinereous, with a slight fawn-brown shade from the base above their middle; a narrow inconspicuous subfuscous band across the extreme apex; cilia cinereous, with a slender paler line along their base.

Abdomen cinereous.

Legs pale cinereous; hind tarsal joints unspotted.

Exp. al. 16 millim.

Hab. West Indies—St. Vincent (windward side, 2 specimens, *Smith*).

Type, ♂ ♀.

HYPONOMEUTINÆ.

HYPONOMEUTA, Z.

HYPONOMEUTA MAHALEBELLUS, Gn.

Yponomeuta mahalebella, Gn. Ind. Meth. p. 105 (1845); id. Ann. Soc. Ent. Fr. (5 s.) ix. p. 282 (1879).

Hyponomeuta mahalebella, Stgr. & Wk. Cat. Lp. Eur. (ii.) no. 1555, p. 277 (1871).

Europe.

West Indies—Cuba (*Gn.*).

HYPONOMEUTA TRIANGULARIS, Mschl.

Hyponomeuta triangularis, Mschl. Ab. Senck. Nat. Ges. xv. pp. 339–40, 354 (1890).

West Indies—Portorico (*Mschl.*).

ÆTA, Grt.

ÆTA PUNCTELLA, Cram.

Phalæna (Tinea) punctella, Cram. Pap. Exot. iv. p. 164, pl. cccclxxii. fig. L (1782).

= *Æta compta*, Grt. Proc. Ent. Soc. Phil. v. pp. 230–1 (1865).

= *Scintilla pustulella*, Gn. Ann. Soc. Ent. Fr. (5 s.) ix. pp. 287–8 (1879); Berg, Ann. Soc. Ci. Argent. x. pp. 100–2 (1880).

Æta punctella, Z. Ver. z.-b. Ges. Wien, xxiii. pp. 228–9 (1873).

Larva: *Ailanthus glandulosa*.

United States, Honduras, Surinam, French Guiana, Argentine Republic, Brazil.

West Indies—Trinidad (*Wlsm.*).

I have a specimen from Trinidad received from Mr. Crowfoot. Walker [Cat. Lp. Ins. B. M. xxxv. p. 1894 (1866)] records this species from India, thus:—"c. Himalaya Mts. Presented by the Entomological Club." This specimen is labelled "Honduras"!

ÆTA FULVIGUTTELLA, Z.

Æta fulviguttella, Z. Ver. z.-b. Ges. Wien, xxiii. pp. 231–2 (1873).

= *Syblis glaucopidella*, Gn. Ann. Soc. Ent. Fr. (5 s.) ix. p. 289 (1879); Berg, An. Soc. Ci. Argent. x. pp. 106–7 (1880).

(? Australia, Z.)

West Indies—Jamaica (*Gn.*).

ÆTA FASTUOSA, Z.

Æta fastuosa, Z. Hor. Soc. Ent. Ross. xiii. pp. 225-7, pl. iii. fig. 68 (1877); Berg, An. Soc. Ci. Argent. x. p. 109 (1880).

West Indies—Cuba (Z.).

ÆTA SIDEREA, sp. n.

Antennæ slightly serrate; grey-brown.

Palpi blackish, with a white ring around the junction of the second and apical joints.

Head white above, face with a black cross band.

Thorax purplish in front and behind, with a large shining golden-yellow patch on each side (possibly joined in the middle, where my specimen is pinned); tegulæ shining golden-grey.

Fore wings purplish blue, a golden-yellow spot at the extreme base scarcely separated from the costal margin; beyond it an elongate spot of the same colour reaching to two thirds of the wing-length; a round golden-yellow spot on the middle of the dorsal margin, with a smaller one above and beyond it; beneath the costal margin a broad sinuate golden-yellow band from immediately before the apex reaches to the anal angle, leaving the apical margin of the purplish ground-colour, which is profusely irrorated throughout with round snow-white spots; cilia purplish grey. Underside brownish grey.

Hind wings brownish grey, semitransparent, with a strong iridescent sheen, especially about the middle. Underside brownish grey.

Abdomen brownish grey, a series of paler spots along its upper side.

Legs purplish grey barred with white.

Exp. al. 19 millim.

Hab. West Indies—San Domingo.

Type, ♀ Mus. Wlsm.

This specimen was kindly given me by Dr. Fernald in 1884.

EUARNE, Mschl. & Saalm.*EUARNE OBLIGATELLA*, Mschl.

Euarne obligatella, Mschl. Ab. Senck. Nat. Ges. xv. pp. 340, 354 (1890).

West Indies—Portorico (*Mschl.*).

TRICHOSTIBAS, Z.*TRICHOSTIBAS CALLIGERA*, Z.

Trichostibas calligera, Z. Hor. Soc. Ent. Ross. xiii. pp. 231-2 (1877).

West Indies—Cuba (Z.).

TRICHOSTIBAS OVATA, Z.

Trichostibas ovata, Z. Hor. Soc. Ent. Ross. xiii. p. 233 (1877).

West Indies—Cuba (Z.).

TRICHOSTIBAS SORDIDATA, Z.

Trichostibas sordidata, Z. Hor. Soc. Ent. Ross. xiii. pp. 233-4 (1877).

West Indies—Portorico (Z.).

TRICHOSTIBAS ? IOPHLEBIA, Z.

Trichostibas iophlebia, Z. Hor. Soc. Ent. Ross. xiii. pp. 228-9, pl. iii. fig. 69 (1877).

West Indies—Antilles (Z.).

If the neuration, which is partly given in the figure, is correct, this species cannot be a *Trichostibas*, but must be allied to *Cydosia nobilitella*, Cram., the type of Smith's *Cydosiinæ*, which would necessitate its removal from the *Tineidæ*.

*BUTALINÆ.**AUXIMOBASIS*, gen. nov.

(αὐξίμος=promoting growth; βάσις=the base.)

Type, ♂ ♀ *Auximobasis persimilella*, Wlsm.

Antennæ with the basal joint enlarged, flattened, not notched, with a small pecten in front.

Maxillary palpi small.

Labial palpi smooth, recurved to the top of the head; apical joint slender, more than half the length of the second joint.

Haustellum scaled.

Head smooth.

Thorax stout, smooth.

Fore wings elongate, lanceolate, slightly rounded at the apex, costal margin nearly straight, dorsal margin bulged at the base, straight beyond. *Neuration*: 12 veins; 2, 3, and 4 very short; 7 and 8 form a common stem to above apex.

Hind wings nearly as wide as the fore wings; lanceolate, tapering outwards, widest at the abdominal margin; cilia long. *Neuration*: 8 veins; 3 from the lower angle of cell, 4 and 5 forked out of 3 from near its base; 6 and 7 separate.

Legs: hind tibiæ densely clothed.

AUXIMOBASIS PERSIMILELLA, sp. n. (Plate XLI. fig. 9, a-c).

Antennæ cinereous, basal joint hoary.

Palpi cinereous, stained with fuscous externally nearly to the apex of the second joint.

Head hoary cinereous.

Thorax hoary cinereous.

Fore wings hoary cinereous, sprinkled with fuscous scales; an ill-defined slightly outcurved fuscous band scarcely before the middle of the wing from the costal to the dorsal margin; a pair of fuscous

dots beyond the end of the cell, and a slight angulated fuscous shade before the apex running parallel to the margin of the wing (in some specimens these markings are almost obsolete); cilia cinereous.

Hind wings greyish; cilia cinereous.

Abdomen cinereous, faintly banded with a deeper shade.

Legs: hind tibiæ fuscous, externally clothed above with pale cinereous hairs; spurs and tarsal joints pale cinereous.

Exp. al. 10–12 millim.

Hab. West Indies—St. Vincent (Kingstown, 2 specimens; windward side, 6 specimens, *Smith*).

Type, ♂ ♀.

In markings this species is scarcely distinguishable from a small specimen of *Blastobasis phycidella*, Z., but the absence of an antennal notch and the neurulation of the hind wings at once distinguish it. It is the only form allied to *Blastobasis* that I have yet met with in which veins 3 and 4 of the hind wings proceed from a stalk out of 3 instead of coming direct from the edge of the cell; the whole group is an exceedingly difficult one, and the multiplication of genera founded on good structural differences, however slight, can only facilitate their future classification, especially as the species are at least as difficult to separate by pattern and markings as are the genera.

HELIODININÆ.

HELIODINES, Stn.

HELIODINES MARGINATA, sp. n.

Antennæ simple, as long as the fore wings; sooty brown.

Palpi short, slender, dependent; sooty brown.

Head and *thorax* sooty brown; underside of the thorax with a conspicuous orange yellow spot on each side.

Fore wings shining orange-yellow, very narrowly margined throughout with sooty brown, which is diffused over the extreme apex; a single lilac shining metallic spot lies on the costal margin near the base; there are two slender, but by no means conspicuous, streaklets of the same colour—one along the base of the cilia about the region of the anal angle, the other much shorter, above and parallel to it, forming a short tooth-like projection inwards from the middle of the suffused dark apical portion of the wing; cilia sooty brown. Underside unicolorous greyish brown.

Hind wings deep brown; cilia sooty brown. Underside unicolorous greyish brown.

Abdomen and *legs* sooty brown.

Exp. al. 8 millim.

Hab. West Indies—St. Vincent (windward side, 1 specimen, *Smith*).

Type, ♂.

COSMOPTERYGINÆ.

COSMOPTERYX, Hb.

COSMOPTERYX LESPEDEZÆ, Wlsm.

Cosmopteryx lespedeza, Wlsm. Tr. Am. Ent. Soc. x. p. 198 (1882).*Larva* on *Lespedeza* (in U.S., Wlsm.).

United States—Texas, N. Carolina.

West Indies—St. Vincent (Kingstown and windward side, 4 specimens, *Smith*).

COSMOPTERYX (? GEMMIFERELLA, Clem.), Mschl.

Cosmopteryx gemmiferella, Clem. Proc. Ac. Nat. Sc. Phil. xii. p. 10 (1860); Stn. Tin. N. Am. pp. 39, 100-1 (1872).*Cosmopteryx* (? *gemmiferella*, Clem.), Mschl. Ab. Senck. Nat. Ges. xv. pp. 345, 354 (1890).*Larva* on *Zizania miliacea*, April and June (in U.S., F. & B.).

United States—Texas, Pennsylvania.

West Indies—Portorico (*Mschl.*).

COSMOPTERYX SANCTI-VINCENTII, sp. n.

Antennæ brown, with a slender white line along each side reaching to a white ring around the eighth joint from the apex; apical joint white.*Palpi* brownish, with slender whitish lines throughout their length above and beneath.*Head* brown.*Thorax* brown, with a slender longitudinal central white streak.*Fore wings* brown to a little beyond the middle, apex brown, separated from the basal half by a broad pale yellow band; on the basal half are four distinct slender white longitudinal lines—the first along the costal margin from the base to the yellow band, sometimes slightly interrupted about its middle; a second from near the base above the fold parallel with the first and about two thirds its length; a third below the outer half of the fold, short, commencing at one half the length of the brown basal half and not reaching the yellow band; a fourth along the dorsal margin reaching to a point opposite the commencement of the third; the brown basal half is bordered obliquely by two spots of raised pale golden scales, sometimes connected, the upper spot being slightly nearer to the base than the lower one, at the outer edge of the upper spot is a minute dot of jet-black scales; at the outer edge of the broad yellow band are two opposite pale golden spots, the one costal, the other, which is the larger, dorsal; between these spots the yellow colour of the band is continued for a small space and emits into the brown apical part of the wing a slender straight golden-yellowish line to the extreme apex; a few whitish scales on the costa form an outer margin to the second pale golden-yellow costal spot; cilia greyish brown.

Hind wings greyish brown, cilia the same.

Abdomen brownish cinereous, pale beneath.

Legs brownish, spotted on the spurs and tarsal joints with silvery white.

Exp. al. 10 millim.

Hab. West Indies—St. Vincent (Kingstown and windward side, 2 specimens, *Smith*).

Type, ♂ ♀.

LAVERNINÆ.

ANYBIA, Stn.

ANYBIA CONSPERSA, sp. n.

Antennæ with the basal joint somewhat enlarged outwardly; greyish fuscous, the last eight or nine joints at the apex whitish ochreous.

Palpi recurved to above the base of the antennæ; apical and second joints about equal in length; dark fuscous, externally delicately stippled with cinereous scales.

Head greyish fuscous; face pale cinereous.

Thorax greyish fuscous, speckled with pale cinereous, especially at the sides.

Fore wings narrow, elongate, tapering, acuminate, with long cilia; cinereous, thickly clouded and sprinkled with fuscous; a slight chestnut-brown shade near the base, adjacent to but below the fold; a few chestnut scales also above the fold halfway to the costal margin; dorsal margin thickly clouded with fuscous throughout; a small fuscous dot lies at the end of the cell on the middle of the wing, and indeed over the whole wing-surface the dark scaling predominates; cilia greyish cinereous.

Hind wings very narrow, less than half the width of the fore wings; with very long cilia; brownish grey; cilia greyish cinereous.

Abdomen greyish cinereous; anal tuft subochreous.

Legs: hind tibiæ fringed above; pale ochreous on their inner and under sides, greyish fuscous externally; hind tarsal joints faintly spotted with pale cinereous, a small pale ochreous spot above the first pair of spurs.

Exp. al. 11–12 millim.

Hab. West Indies—St. Vincent (Kingstown and windward side, 3 specimens, *Smith*).

Type, ♀.

The genus *Anybia* is represented in Europe by a single species, with which I have very carefully compared the two now described; the neuration is undoubtedly similar and the very slight difference in the more recurved palpi is quite insufficient to separate them, especially as the comparative lengths of the joints with their closely appressed scales precisely agree with the type. It is remarkable that this genus should not have been recorded from other localities, since its presence in the West Indies indicates the probability of a wider distribution.

ANYBIA CURVIPUNCTELLA, sp. n.

[*Antennæ* wanting.]

Palpi recurved to base of antennæ, apical joint as long as the second; purplish fuscous.

Head purplish fuscous; face shining pale cinereous.

Thorax purplish fuscous.

Fore wings purplish fuscous, with a semicircular pale ochreous spot on the outer third of the fold, which runs through the middle of it, its concavity being towards the base; two minute very pale ochreous spots—one costal, the other dorsal—opposite to each other at about one fifth from the apex; cilia purplish fuscous at the apex, pale cinereous on the dorsal margin below it.

Hind wings very narrow; pale greyish; cilia pale cinereous with a faint ochreous tinge.

Abdomen greyish cinereous.

Legs purplish fuscous externally, very pale ochreous internally; posterior tibiæ fringed above with very pale ochreous hairs; a pale ochreous spot at the base of the spurs and some pale ochreous spots on the posterior tarsal joints.

Exp. al. 8 millim.

Hab. West Indies—St. Vincent (windward side, 1 specimen, *Smith*).

Type, ♀.

A much smaller species than *consersa*, and at once distinguished by the pale ochreous spot on the fold.

BATRACHEDRINÆ.

BATRACHEDRA, Stn.

BATRACHEDRA ALBISTRIGELLA, Mschl.

Batrachedra albistrigella, Mschl. Ab. Senck. Nat. Ges. xv. pp. 345, 354 (1890).

West Indies—Portorico (*Mschl.*).

ZARATHRA, Wkr.

ZARATHRA INSULELLA, sp. n.

Antennæ half as long again as the fore wings; basal joint very slightly enlarged; pale yellowish.

Maxillary palpi slightly folded.

Labial palpi very long, recurved, slender, acuminate; apical joint slightly longer than the second; white.

Head thickly clothed with appressed scales, projecting in front at the sides of the face; shining whitish with an aureous tinge.

Thorax pale yellowish.

Fore wings shining pale straw-colour, with an aureous streak extending from the base along the middle and spreading over the costal margin beyond the middle of the wing, and crossing the fold towards the dorsal margin in two diffused spots, the first near the base, the other about the middle; immediately before the apex is a

slender shining leaden-grey semicircular line bulging outwards from the costal and recurved to the dorsal margin about the anal angle ; at the apex is a conspicuous black spot, from which a curved black line runs through the cilia towards the anal angle, but is ended abruptly before reaching it ; between this and the semicircular shining line already mentioned is an oblique straight black line following the margin of the wing at the base of the cilia and reaching upwards nearly to the costo-apical spot ; cilia tipped with black at the extreme apex, those on the hind margin pale reddish grey. Underside brownish fuscous.

Hind wings grey ; cilia pale reddish grey.

Abdomen reddish grey.

Legs : hind tibiæ fringed above with separate pale yellowish hairs, giving a pectinate appearance ; a black spot lies at the base of the spurs and three black bands on the tarsal joints, which are otherwise white.

Exp. al. 9 millim.

Hab. West Indies—St. Vincent (3 specimens, *Smith*).

Type, ♂.

This species is closely allied to *Gracilaria leuconota*, Z., from Ubaque, which also probably belongs to this genus ; the species now described differs chiefly in the larger dark apical spot, which is placed nearer to the costal margin, and in the presence of the oblique black streak below it. I am justified in separating it from the genus *Gracilaria* on account of its much longer antennæ and its slender long recurved palpi ; the maxillary palpi, although undoubtedly present in the typical *Zarathra*, are not quite so strongly developed as in this species, but the shape of the wings is the same, and, so far as I can judge without denuding the specimen, the general pattern of neuration is similar. This genus is not confined to South America, but extends also to Africa and the Indian region.

GRACILARIANÆ.

GRACILARIA, Hw.

GRACILARIA ÆNEOCAPITELLA, sp. n.

Antennæ greyish, faintly spotted with paler colour.

Palpi whitish, outer half of second joint fuscous, except at the extreme apex.

Head shining iridescent bronze ; face shining metallic whitish.

Thorax shining bronzy.

Fore wings tawny purplish, mixed with pale lemon-yellow beyond the basal fourth ; a conspicuous broad pale lemon-yellow band extends from the basal third along the costal portion of the wing to the apex, its margin not clearly defined, the tawny purple blending into it from below ; this band is widest and most conspicuous about its commencement, where it contains one or two minute fuscous costal dots ; a series of dark purple striæ is also visible along the dorsal margin, and some small groups of fuscous scales are on the apical portion of the wing, reaching to the extreme apex ; cilia at

apex and beneath it pale yellowish sprinkled with fuscous, on the dorsal margin grey.

Hind wings grey, with cilia of the same colour.

Abdomen grey; shining creamy white beneath.

Legs: anterior and median pair with bronzy-brown tibiae and white tarsal joints; posterior pair shaded above with bronzy brown, tarsal joints whitish.

Exp. al. 12 millim.

Hab. West Indies—St. Vincent (windward side, 1 specimen, *Smith*).

Type, ♂.

GRACILARIA APICEPUNCTELLA, sp. n.

Antennæ with the basal joint slightly enlarged; longer than the fore wings; very pale cinereous.

Palpi rather long, dependent, slender; second joint cinereous, with a darker spot on its outer side at the apex; apical joint about equal in length to the second, whitish, with a dark spot rather before the middle on its outer side.

Head very pale cinereous; face whitish.

Thorax dirty whitish.

Fore wings greyish fuscous, obliquely barred with interrupted creamy-white bands along the dorsal half of the wing; a round black apical spot enclosed in a pale ferruginous apical space, which is narrowly black-margined, its anterior margin straight, its posterior margin following the base of the cilia around the apex and apical margin to the anal angle; the creamy-white bands and markings are distributed as follows:—near the base a small square dorsal spot; beyond it before the middle a larger spot tending obliquely outwards towards a small subcostal spot before the middle, between which and the base is a second smaller subcostal spot; a narrow line from before the middle runs along the dorsal margin, and is dilated beyond the middle into a large trapezoidal dorsal patch, which reaches to the inner margin of the pale ferruginous apical space, and diverted to the costa by a narrow line internally and externally dark-margined, its external margin being the blackish inner margin of the ferruginous space already mentioned; before this narrow line are three short longitudinal streaks, the middle one almost or quite communicating with a short oblique subcostal streak beyond the middle, near the costal end of which another oblique separate streak arises, which tends backward towards the dorsal margin, terminating above the origin of the narrow dorso-marginal line before the middle of the wing-length; cilia pale greyish tipped with black, on the dorsal margin pale greyish.

Hind wings and cilia greyish.

[*Abdomen* missing.]

Exp. al. 8 millim.

Hab. West Indies—St. Vincent (windward side, 1 specimen, *Smith*).

Type, ♀.

The following species do not belong to the families dealt with in this paper:—

Grapholitha? subapicana, Wkr. Cat. Lp. Ins. B. M. xxviii. pp. 387-8 (1863).

West Indies—San Domingo (*Wkr.*).

Galasa rubidana, Wkr. Cat. Lp. Ins. B. M. xxxv. p. 1802 (1866).

West Indies—Jamaica (*Wkr.*).

Eggyna submutata, Wkr. Cat. Lp. Ins. B. M. xxxv. pp. 1895-6 (1866).

West Indies—San Domingo (*Wkr.*).

Cydosia nobilitella, Cram. Pap. Exot. iii. p. 128, pl. cclxiv. fig. G (1779).

South America, Central America.

West Indies.

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TABLE OF DISTRIBUTION.

[illegible]

TABLE (continued).

	WEST INDIES.									Other Localities.
	Cuba.	Jamaica.	Haiti or San Domingo.	Portorico.	St. Thomas.	St. Martin.	Dominica.	St. Vincent.	Trinidad.	
TORTRICIDÆ.										
TORTRICINÆ.										
8. APINOGLOSSA, <i>Mschl.</i> ♂ <i>Saalm.</i>										
16. comburana, <i>Mschl.</i>				*						
9. CACCECIA, <i>Hb.</i>										
17. jamaicana, <i>Wkr.</i>		*								
10. (TORTRIX, <i>L.</i>)										
18. effoetana, <i>Mschl.</i>				*						
19. insignitana, <i>Mschl.</i>				*						
11. PTYCHAMORBIA, <i>Wlsm.</i>										
20. catenana, <i>Wlsm.</i>							*			Brazil.
12. PLATYNOTA, <i>Clem.</i>										
21. rostrana, <i>Wkr.</i>			*				*			Florida, Venezuela, Brazil.
22. repandana, <i>Wkr.</i>			*							
13. CERATORRHINETA, <i>Z.</i>										
23. calidana, <i>Z.</i>	*									
CONCHYLIDINÆ.										
14. CONCHYLIS, <i>Tr.</i>										
24. lacteipalpis, <i>Wlsm.</i> ..							*			
25. prolectana, <i>Mschl.</i>				*						
26. tectonica, <i>Mschl.</i>				*						
27. vicinitana, <i>Mschl.</i>				*						
28. bunteana, <i>Rob.</i>							*			United States
29. sp., <i>Wlsm.</i>							*			
30. sp., <i>Wlsm.</i>							*			
GRAPHOLITHINÆ.										
15. BACTRA, <i>Stph.</i>										
31. lanceolana, <i>Hb.</i>							*			Europe, Africa, Asia, Australia. New Zealand, United States.
16. EPISIMUS, <i>Wlsm.</i>										
transferrana, <i>Wkr.</i>										Brazil.
32. var. vincentana, <i>Wlsm.</i> ..							*			
33. augmentana, <i>Z.</i>	*									
17. CACOCHARIS, <i>Wlsm.</i>										
34. albimacula, <i>Wlsm.</i>							*			
18. PHOXOPTERIS, <i>Tr.</i>										
35. virididorsana, <i>Mschl.</i> ..			*							
19. GRAPHOLITHA, <i>H.-S.</i>										
36. livens, <i>Wlsm.</i>							*			
37. excitana, <i>Mschl.</i>			*							

TABLE (continued).

	WEST INDIES.									Other Localities.
	Cuba.	Jamaica.	Haiti or San Domingo.	Portorico.	St. Thomas.	St. Martin.	Dominica.	St. Vincent.	Trinidad.	
<i>GRAPHOLITHINÆ</i> (continued).										
20. (? <i>COPTOLOMA</i> , <i>Ld.</i>)										
33. <i>figurana</i> , <i>Z.</i>					*					
39. <i>albicapitana</i> , <i>Wlsm.</i>								*		
21. <i>PÆDISCA</i> , <i>Tr.</i>										
40. <i>longipalpana</i> , <i>Mschl.</i>				*						
22. <i>CROCIDOSEMA</i> , <i>Z.</i>										
41. <i>plebeiana</i> , <i>Z.</i> ..								*		
Europe, Australia, Brazil, Peru, Argentine Republic.										
23. <i>STREPSICRATES</i> , <i>Meyr.</i>										
42. <i>smithiana</i> , <i>Wlsm.</i>								*		
24. <i>HELIGMOCERA</i> , <i>Wlsm.</i>										
43. <i>calvifrons</i> , <i>Wlsm.</i>								*		
<i>TINEIDÆ.</i>										
<i>TINEINÆ.</i>										
25. <i>TINEA</i> , <i>L.</i>										
44. <i>plumella</i> , <i>Wlsm.</i> .. .								*		
45. <i>sp.</i> , <i>Wlsm.</i>								*		
46. ? <i>sp.</i> , <i>Btl.</i>		*								
<i>DENDRONEURINÆ.</i>										
26. <i>DENDRONEURA</i> , <i>Wlsm.</i>										
47. <i>praestans</i> , <i>Wlsm.</i> ..								*		
<i>SETOMORPHINÆ.</i>										
27. <i>SETOMORPHA</i> , <i>Z.</i>										
48. <i>rupicella</i> , <i>Z.</i>		*								
<i>ANAPHORINÆ.</i>										
28. <i>EULEPISTE</i> , <i>Wlsm.</i>										
49. <i>umbratipalpis</i> , <i>Wlsm.</i>			*							
29. <i>ACROLOPHUS</i> , <i>Poey.</i>										
50. <i>vitellus</i> , <i>Poey.</i>	*			*						
51. <i>poeyi</i> , <i>Wlsm.</i>								*		
52. <i>niveipunctata</i> , <i>Wlsm.</i> ..	*									
53. <i>plumifrontellus</i> , <i>Clem.</i> ..	*			*						
54. <i>walsinghami</i> , <i>Mschl.</i> ..				*						
55. <i>leucodocis</i> , <i>Z.</i>	*									
United States.										
30. <i>CENOGENES</i> , <i>Wlsm.</i>										
56. <i>pusilla</i> , <i>Z.</i>							*			
57. <i>ochracea</i> , <i>Mschl.</i>				*						
Colombia.										

TABLE (continued).

	WEST INDIES.									Other Localities.	
	Cuba.	Jamaica.	Haiti or San Domingo.	Portorico.	St. Thomas.	St. Martin.	Dominica.	St. Vincent.	Trinidad.		Curacao.
ANAPHORINÆ (continued).											
31. ANAPHORA, Clem.											United States.
58. popeanella, Mschl.	*	
59. arcasalis, Wkr.	*								
60. mimasalis, Wkr.	*								
61. noctuina, Wlsm.	*										
32. FELDERIA, Wlsm.											
62. dimidiella, Wlsm.	*										
33. BAZIRA, Wkr.											
63. xylinnella, Wkr.	*									
EUPLOCAMINÆ.											
34. AMYDRIA, Clem.											Europe.
64. anaphorella, Wlsm.	*	
35. MYRMECOZELA, Z.											
65. ochraceella, Tengstr.	*	
36. TIQUADRA, Wkr.											
66. aspera, Z.	*	
67. lentiginosa, Z.	*	Brazil, Peru.
68. sp., Wlsm.	*				
37. PEXICNEMIDIA, Mschl.											
69. mirella, Mschl.	*							
PLUTELLINÆ.											
38. PLUTELLA, Schrk.											Europe, Asia, Africa, North America, South America, Australia.
70. cruciferarum, Z.	*	
GELECHIANÆ.											
39. GELECHIA, Z.											
71. donatella, Wkr.	*									
72. robustella, Wkr.		*								
73. attenuatella, Wkr.	*									
74. exclarella, Mschl.	*							
75. costipunctella, Mschl.	*							
76. rivulella, Mschl.	*							
77. cinereocervina, Wlsm.	*	
78. sp., Snell.	*	
79. ? sp., Snell.	*	
40. BRYOTROPHA, Hein.											
80. translucida, Wlsm.	*	*	
81. sp., Wlsm.	*	

TABLE (continued).

	WEST INDIES.									Other Localities.
	Cuba.	Jamaica.	Haiti or San Domingo.	Portorico.	St. Thomas.	St. Martin.	Dominica.	St. Vincent.	Trinidad.	Curacao.
GELECHIANÆ (continued).										
41. LITA, <i>Tr.</i>										
82. crocipunctella, <i>Wlsm.</i>	*		
42. PÆCILIA, <i>Hein.</i>										
83. extranea, <i>Wlsm.</i>	*		
43. DIDACTYLOTA, <i>Wlsm.</i>										
84. bicolor, <i>Wlsm.</i>	*		
44. TACHYPTILIA, <i>Hein.</i>										
85. desectella, <i>Z.</i>	*									
45. HELCYSTOGRAMMA, <i>Z.</i>										
86. obseratella, <i>Z.</i>	*									
46. TRICHOTAPHÆ, <i>Clem.</i>										
87. trigonella, <i>Wlsm.</i>	*		
47. BRACHYGLOSSATA, <i>Hein.</i>										
88. psoricopterella, <i>Wlsm.</i>	*		
48. DIATOMA, <i>Mschl.</i>										
89. squamosa, <i>Wlsm.</i>	*		
49. POLYHYMNO, <i>Chamb.</i>										
90. godmani, <i>Wlsm.</i>	*		
50. YPSOLOPHUS, <i>Z.</i>										
91. manellus, <i>Mschl.</i>	*						
92. rusticus, <i>Wlsm.</i>	*		United States.
93. piperatus, <i>Wlsm.</i>	*		
94. indignus, <i>Wlsm.</i>	*		
ÆCOPHORINÆ.										
51. PSECADIA, <i>Hb.</i>										
95. confusella, <i>Wkr.</i>	*	*	*	Colombia.
96. ingricella, <i>Mschl.</i>	*	*	
97. paucella, <i>Wkr.</i>	*	
98. notatella, <i>Wkr.</i>	*	*	*	
99. abraxasella, <i>Wkr.</i>	*	*	*	
100. adustella, <i>Z.</i>	*	
101. exornata, <i>Z.</i>	*	Peru.
102. kirbyi, <i>Mschl.</i>	*	
103. gelidella, <i>Wkr.</i>	*	
104. nivoseella, <i>Wkr.</i>	*	*	
ATYCHIANÆ.										
52. TORTYRA, <i>Wkr.</i>										
105. auriferalis, <i>Wkr.</i>	*	*	*	*	*		
53. GAURIS, <i>Hb.</i>										
106. biferana, <i>Wkr.</i>	*	
107. rimulalis, <i>Z.</i>	*	*	

TABLE (continued).

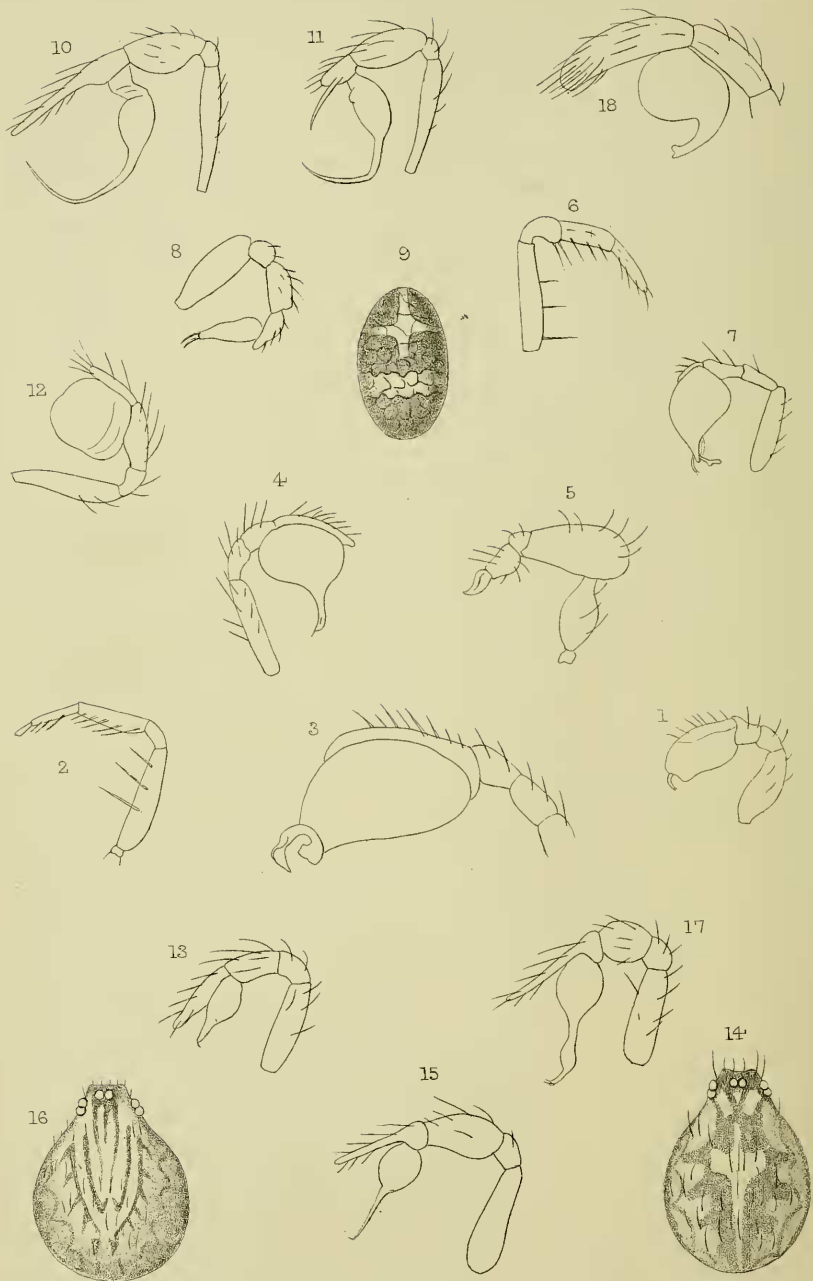
	WEST INDIES.									Other Localities.
	Cuba.	Jamaica.	Haiti or San Domingo.	Portorico.	St. Thomas.	St. Martin.	Dominica.	St. Vincent.	Trinidad.	
<i>CHOREUTINÆ.</i>										
54. BRENTIHA, <i>Clem.</i>										
108. pavonacella, <i>Clem.</i> ...				*						United States, Central America, Brazil.
<i>GLYPHIPTERYGINÆ.</i>										
55. TRAPEZIOPHORA, <i>Wlsm.</i>										
109. gemmula, <i>Wlsm.</i>								*		
<i>XYLORYCTINÆ.</i>										
56. GLYPHIDOCERA, <i>Wlsm.</i>										
110. audax, <i>Wlsm.</i>								*		
<i>HYPONOMEUTINÆ.</i>										
57. HYPONOMEUTA, <i>Z.</i>										
111. mahalebells, <i>Gn.</i>	*									Europe.
112. triangularis, <i>Mschl.</i> ...				*						
58. CETA, <i>Grt.</i> -										
113. punctella, <i>Cram.</i>								*		United States, Honduras, Surinam, French Guiana, Brazil, Argentine Republic. (? Australia, <i>Z.</i>)
114. fulviguttella, <i>Z.</i>		*								
115. fastuosa, <i>Z.</i>		*								
116. siderea, <i>Wlsm.</i>			*							
59. EUARNE, <i>Mschl. & Saalm.</i>										
117. obligatella, <i>Mschl.</i>				*						
60. TRICHOSTIBAS, <i>Z.</i>										
118. calligera, <i>Z.</i>		*								
119. ovata, <i>Z.</i>		*								
120. sordidata, <i>Z.</i>				*						
121. ? iophlebia, <i>Z.</i>										Antilles (<i>Z.</i>).
<i>BUTALINÆ.</i>										
61. AUXIMOBASIS, <i>Wlsm.</i>										
122. persimilella, <i>Wlsm.</i> ...								*		
<i>HELIODININÆ.</i>										
62. HELIODINES, <i>Stn.</i>										
123. marginata, <i>Wlsm.</i>								*		

TABLE (continued).

	WEST INDIES.									Other Localities.
	Cuba.	Jamaica.	Haiti or San Domingo.	Portorico.	St. Thomas.	St. Martin.	Dominica.	St. Vincent.	Trinidad.	
<i>COSMOPTERYGINÆ.</i>										
63. COSMOPTERYX, <i>Hb.</i>										
124. <i>lespedezæ</i> , <i>Wlsm.</i>	*	United States.
125. (? <i>gemmiferella</i> , <i>Clem.</i>)										
<i>Mschl.</i>	*	United States.
126. <i>sancti-vincentii</i> , <i>Wlsm.</i>	*	
<i>LAVERNINÆ.</i>										
64. ANYBIA, <i>Stn.</i>										
127. <i>conspersa</i> , <i>Wlsm.</i>	*	
128. <i>curvipunctella</i> , <i>Wlsm.</i>	*	
<i>BATRACHEDRINÆ.</i>										
65. BATRACHEDRA, <i>Stn.</i>										
129. <i>albistrigella</i> , <i>Mschl.</i>	*	
66. ZARATHIRA, <i>Wkr.</i>										
130. <i>insulsella</i> , <i>Wlsm.</i>	*	
<i>GRACILARIANÆ.</i>										
67. GRACILARIA, <i>Hw.</i>										
131. <i>æneocapitella</i> , <i>Wlsm.</i>	*	
132. <i>apicepunctella</i> , <i>Wlsm.</i>	*	

EXPLANATION OF PLATE XLI.

- Fig. * 1. *Ptychamorbia exustana*, ♂ ♀, p. 497.
a, Neurulation, ♀; *b*, neurulation of fore wing, ♂; *c*, head, ♂;
d, head, ♀; *e, f*, antenna, ♂.
- * 2. *Ceratorrhineta calidana*, ♂ ♀, p. 499.
a, Neurulation, ♂; *b*, neurulation of fore wing, ♀; *c*, head, ♂;
d, head, ♀; *e*, antenna, ♂.
3. *Episimus transferrana*, ♂, p. 501.
a, Neurulation; *b*, head.
- * 4. *Cacocharis albimacula*, ♀, p. 503.
a, Neurulation; *b*, head.
- * 5. *Heligmocera calvifrons*, ♂, p. 507.
a, Neurulation; *b, c*, head; *d*, antenna.
- * 6. *Dendroneura præstans*, ♂ ♀, p. 509.
a, Neurulation, ♂; *b*, head, ♂; *c*, head, ♀.
- * 7. *Trapeziophora gemmula*, ♂, p. 530.
a, Neurulation; *b*, head.
- * 8. *Glyphidocera audax*, ♂, p. 531.
a, Neurulation; *b*, head; *c*, antenna.
- * 9. *Auximobasis persimilella*, ♂, p. 534.
a, Neurulation; *b*, head; *c*, antenna.



A.T.H. sc.

West, Newman imp.

Fig. * 10. *Eulepiste umbratipalpis*, ♂, p. 511. Genital segments.

11. *Acrolophus vitellus*, ♂, p. 512. Genital segments.

* 12. — *poeyi*, ♂, p. 512. Genital segments.

13. — *walsinghami*, ♂, p. 514. Genital segments.

* 14. *Anaphora noctuina*, ♂, p. 515. Genital segments.

* 15. *Felderia dimidiella*, ♂, p. 516. Genital segments.

* = Drawn from the type.
The figures are all enlarged.

3. On the Spiders of the Island of St. Vincent.—Part I.

By E. SIMON¹.

[Received October 16, 1891.]

(Plate XLII.)

[The Spiders dealt with in this memoir have all been obtained in the island of St. Vincent, British West Indies, by Mr. H. H. Smith, who was sent to the island by Mr. F. DuCane Godman, F.R.S., in order that he might assist the joint Committee appointed by the British Association and the Royal Society to report on and investigate the Natural History of the West-Indian Islands.

M. Eugène Simon has, at the request of the Committee, been so good as to undertake the examination and description of the Spiders², and in this paper he gives the result of his examination of the specimens belonging to the families Aviculariidae, Filistatidae, Uloboridae, Dysderidae, Oonopidae, Leptonetidae, Sicariidae, Caponiidae, Drassidae, and Palpimanidae.

As only a portion of the Order Araneae is treated of in this first result of M. Simon's studies it would be premature to give statistics, but it is worth while to call attention to the facts that a great portion of the species—about 80 per cent.—are found to be new, and that a considerable number of the novelties are known to occur also in Venezuela, which country M. Simon himself recently visited, with the result of discovering a very large number of new Spiders and insects.—D. S.]

Ordo ARANEÆ, Sund.

Subordo ARANEÆ THERAPHOSÆ, Walck.

1. Familia AVICULARIIDÆ.

1. Sectio *Aviculariidae trionychæ*.

Subfamilia PARATROPINÆ.

Gen. ANISASPIS, nov. gen.

Cephalothorax humilis, *fovea carens*. *Oculi fere ut in Paratropi*,
sed inter se magis appropinquati et subcontigui. *Partes oris*

¹ Communicated by Dr. D. Sharp, F.R.S., F.Z.S., on behalf of the Committee for Investigating the Fauna and Flora of the West-Indian Islands.

² With the exception of those belonging to the family Attidae, which will be worked out by Mr. Geo. W. Peckham, of Milwaukee.

pedesque fere ut in Paratropi, sed parte labiali apice arcuata et minus dense spinulosa, pedum ungue inferiore vix ullo. Mamillæ duæ, articulo basali brevi et lato, articulo medio longiore et cylindrico, articulo ultimo medio multo brevior et obtuse conico.

A *Paratropi*, E. Sim.¹, cui affinis est imprimis differt cephalothorace fovea carente, mamillis duabus tantum et articulo ultimo medio brevior.

1. *ANISASPIS TUBERCULATA*, sp. nov.

♀. *Long.* 4–6 mm.—*Cephalothorax* breviter ovatus, humilis, sed longitudinaliter carinatus, rugosus et impressus, obscure fuscus, pilis pronis curvatis squamulisque ferrugineis crebre vestitus, in medio pilis albidis curvatis, antice uniseriatis postice biseriatis ornatus. Tuber oculorum parvum, elevatum et subrotundum. Oculi conferti. Abdomen breve, antice truncatum, postice leviter ampliatum et obtuse truncatum, fuscum, creberrime ferrugineo-squamulatum et tuberculis bacilliformibus obtusis et transversim ordinatis insigniter decoratum: ad marginem anticum tuberculis quatuor, mediis reliquis majoribus, dein tuberculis minoribus biseriatis sex (2–2–2), postice tuberculis similibus octo quadri-seriatis (4–4). Mamillæ testaceæ. Sternum fulvum, tenuiter rugosum et setis longis clavatis munitum. Partes oris fulvæ et nitidæ. Pedes obscure fulvo-olivacei, fusco-variati, femoribus crassis, tuberculis parvis parum regulariter seriatis munitis, patellis tibiisque leviter angulosis, superne parvulum depressis, tibiis cunctis supra aculeis binis: 1^o gracili et arcuato, altero erecto et apice clavato, et subtus aculeis plurimis similibus armatis; metatarsis tarsiisque cylindraceis sat gracilibus, et (saltem posticis) superne seta valida et erecta munitis.

Insula Sancti Vincentii.

Subfamilia CTENIZINÆ.

2. *PACHYLOMERUS SALEBROSUS*, sp. nov.

♀. *Long.* 16 mm.—*Cephalothorax* normalis, lævis, nigro-piceus, parte cephalica postice leviter dilutior. Oculi antici a sese anguste et fere æque separati, mediis rotundi lateralibus plus $\frac{1}{2}$ minores, laterales late ovati et obliqui. Medii postici mediis anticis vix minores, leviter angulosi, a lateralibus posticis haud separati. Laterales postici mediis vix majores sed multo minores quam laterales antici. Spatium inter laterales anticos et posticos diametro oculi plus quadruplo angustius. Abdomen maximum, fusco-violaceo-sericeum, subtus dilutius, tuberculis minutissimis setiferis conspersum. Chelæ nigrae, prope apicem transversim rugate et rufulo-crinite, rastello ad angulum interiorem abrupte prominente. Partes oris, coxæ, sternumque obscure fulvo-rufescentia, nitida. Pars labialis ad apicem dentibus validis parum regulariter biseriatis (5–3) armata. Coxæ usque ad apicem

¹ Typus *P. scrupens*, E. Sim., ex Amazona: cf. E. Simon, Ann. Soc. Ent. Fr. 1889, p. 214.

dentatæ, dentibus basilaribus reliquis validioribus. Pedes robustissimi, nigro-piceæ, femoribus inferne dilutioribus.

Insula Sancti Vincentii.

A *P. asperulo*, E. Sim., cui valde affinis est, imprimis differt oculis quatuor anticis inter se æquidistantibus, oculis lateralibus posticis mediis vix majoribus, rastello chelarum ad angulum abruptius prominente, parte labiali et præsertim coxis pedum maxillarum crebrius dentatis.

3. PHÆNOTHELE¹ INSULARIS, sp. nov.

♀. Long. 11 mm.—*Cephalothorax fusco-piceus, versus marginem posticum paulo dilutior, lævis et subglaber, elongatus, parte cephalica valde convexa, antice vix attenuata, utrinque sulco obliquo et abbreviato profunde impressa, parte thoracica depressa et postice valde attenuata, fovea valde procurva semilunari. Oculi antici, desuperne visi, lineam rectam designantes, medii lateralibus paulo minores. Oculi postici parvi, inter se subæquales. Abdomen breviter ovatum, supra nigricans et parum dense sericeo-pubescent, subtus testaceum. Mamillæ pallide testaceæ. Chelæ nigrae, validæ, rastello ex dentibus sat parvis sed numerosis et pluriseriatis composito. Sternum, partes oris pedesque fulva, femoribus, præsertim anticis, obscurioribus et olivaceis. Sternum leve, impressionibus parvis binis, transversim late remotis munitum. Pars labialis subquadrata, convexa et mutica. Pedes mediocres, tibia 1ⁱ paris inferne, prope medium, aculeo setiformi munita, metatarso leviter scopulato, aculeo basilari aculeoque apicali minutissimis instructo, tibia 2ⁱ paris aculeis setiformibus binis, metatarso aculeis inferioribus binis robustioribus aculeisque apicalibus binis instructo; patella 3^a paris antice numerose et inordinate aculeata, sed patella 4^a paris mutica, tibia 3^a paris metatarsis 3ⁱ et 4ⁱ parium sat numerose aculeatis, tarsis posticis utrinque prope unguem minute biaculeatis.*

Insula Sancti Vincentii.

"S. end of island. Rocky ground, near the sea-level, under trailing plants."—H. H. S.

Subfamilia DIPLURINÆ.

4. THELECHORIS GUYANENSIS, Walck.

Mygale guyanensis, Walck. Apt. i. 1837, p. 231.

Entomothele guianensis, E. Sim. Ann. Soc. Ent. Fr. 1889, p. 216.

Insula Sancti Vincentii.

Tres commun dans toute l'île.

Espèce également répandue en Guyane et dans le nord du Brésil.

¹ Typus *P. gaujoni*, E. Sim., ex Ecuador: cf. E. Simon, Actes Soc. Linn. Bordeaux, 1889.

Nota.—Le genre *Entomothele*, E. Sim., est synonyme de *Thelechoris*, Karsch, qui a la priorité. D'après une communication du Dr. Lenz de Lubeck *Entomothele striatipes*, E. Sim., serait la même que *Thelechoris rutenbergi*, Karsch, la description et la figure, publiés par le Dr. Karsch, d'après un seul individu mutilé et en très mauvais état, sont tout-à-fait méconnaissables.

5. ACCOLA¹ MODESTA, sp. nov.

♀. Long. 8 mm.—*Cephalothorax angustus, testaceo-rufescens, lævis et nitidus, parce et longe cinereo-setosus. Oculi laterales utrinque juxte contigui, late ovati, anticus postico saltem $\frac{1}{3}$ major, laterales antici obliqui inter se anguste separati; oculi medii parvi, elongati, cum lateralibus posticis lineam parum recurvam formantes. Abdomen oblongum, testaceum, longe et sat remote albido-setosum. Sternum, chelæ pedesque testaceo-rufula, longe setosa, pedes quatuor antici fere mutici, postici, præsertim metatarsis et tibiis, aculeis gracilibus et longis numerosis instructi. Mamillæ lurido-testaceæ, articulo basali reliquis longiore, articulo apicali medio circiter æquilongo vel vix brevior.*

Insula Sancti Vincentii.

Ab *A. lucifuga*, E. Sim., differt oculis lateralibus anticis posticis evidentius majoribus et oculis quatuor posticis lineam minus recurvam designantibus.

Ab *A. cyclopi*, E. Sim., cui magis affinis est et subsimilis, differt imprimis oculis lateralibus anticis paulo minoribus distinctius separatis et mamillarum articulo ultimo multo brevior.

2. Sectio *Aviculariidae dionychæ*.

Subfamilia BARYCHELINÆ.

6. STOTHIS² AFFINIS, sp. nov.

♀. Long. 10-13 mm.—*A. S. astuta, E. Sim., cui valde affinis est, tantum differt spatio inter oculos laterales anticos et posticos diametro magno oculi saltem haud angustiore, pedibus anticis paulo gracilioribus, tibiis inferne aculeis setiformibus binis instructis, metatarsis aculeis binis robustioribus et longioribus, aculeis tibiæ et metatarsorum posticorum numerosioribus, parte labiali apice densius spinulosa.—Cephalothorax obscure fusco-piceus, fulvo-pubescent. Abdomen supra nigricans et fulvo-pubescent, maculis testaceis triseriatis ornatum, maculis mediis (quinque) subquadratis, lateralibus longioribus et obliquis; subtus testaceum et maculis quatuor obscurioribus, plus minus distinctis et laciniosis, notatum. Chelæ, sternum, pedes maxillares pedesque fusco-picea, patellis tarsisque paulo dilutioribus.*

Insula Sancti Vincentii.

“Glen near sea-level, under rubbish; 1000 ft., at roots of ferns.”—H. H. S.

¹ Typus *A. lucifuga*, E. Sim., ex Venezuela: cf. Ann. Soc. Ent. Fr. 1889.

² Typus *S. cenobita*, E. Simon, ex Venezuela: cf. E. Simon, Ann. Soc. Ent. Fr. 1889.

Subfamilia AVICULARIINÆ.

7. TAPINACHENIUS SANCTI-VINCENTII.

Mygale sancti-vincentii, Walckenaer, Apt. i. 1837, p. 216.

♀. *Cephaloth.* long. 17·5 mm., lat. 15 mm. Abd. long. 20 mm. Pedes : I. 46·2 mm., II. 41·5 mm., III. 40 mm., IV. 48·5 mm.—*Cephalothorax* ovatus, humilis, nigricans, pilis tenuibus pronis sericeis leviter violaceo-micantibus, ad marginem longioribus, crebre tectus. Oculi quatuor antici, desuperne visi, lineam sub-rectam formantes ; medii rotundi lateralibus paulo majores et inter se quam a lateralibus paulo remotiores ; laterales elongati atque obliqui. Oculi postici utrinque appropinquati sed distincte separati, medii elongati et postice acuti, laterales latius ovati, mediis majores, sed lateralibus anticis minores, spatio inter laterales anticum et posticum dimidio diametro oculi plus duplo angustiore. Abdomen ovatum, supra nigricans, nigro-velutinum, longe et parcius cinereo-rufulo-hirsutum. Partes oris, sternum, coxæ venterque nigra et nigerrimo-velutina. Partes oris intus coccineo-ciliatæ. Pedes robusti, longissime et creberrime cinereo-sericeo-hirsuti. Scopulæ metatarsorum quatuor anticorum latissimæ et basin attingentes, scopulæ metatarsi 3ⁱ paris tertiam partem basilarem occupantes, metatarsi 4ⁱ paris apicem tantum occupantes. Metatarsus 4ⁱ paris tibia circiter æquilongus. Mamillæ nigre, nigro-velutinæ, metatarso 4ⁱ paris non multo breviores, articulo ultimo medio longiore.

Insula Sancti Vincentii.

Subordo ARANEÆ VERÆ, E. Sim.

1. Araneæ veræ cribellatæ.

1. Familia FILISTATIDÆ.

8. FILISTATA CAPITATA, Hentz.

Filistata capitata, Hentz, Bost. J. Nat. Hist. iv. 1842, p. 228, t. viii. f. 7.

Teratodes depressus, C. Koch, Ar. ix. 1842, p. 103, f. 755.

Filistata cubæcola, Lucas in Ramon de la Sagra, Hist. Cuba, &c., Ar. 1853, p. 74, tab. iv. f. 2.

Filistata capitata, Keyserl. Verh. z.-b. Ges. Wien, 1879, p. 345, tab. iv. f. 33.

Insula Sancti Vincentii.

“Windward side near Stuce River.”—H. H. S.

Espèce très répandue dans toute l'Amérique tempérée et tropicale depuis le sud des Etats-Unis jusqu'à la République Argentine.

2. Familia ULOBORIDÆ.

9. DINOPIS SPINOSUS, Marx.

Dinopis spinosus, Marx, Proceed. Acad. Nat. Sc. Philad. 1889, p. 341, tab. xi.

Insula Sancti Vincentii.

Cette espèce est répandue dans le sud des Etats-Unis (Florida, Alabama, &c.), dans les Antilles, et au Vénézuëla.

10. ULOBORUS PENICILLATUS, sp. nov.

♀. Long. 4 mm.—Cephalothorax nigricans, linea media testacea, antice evanescente, notatus, pilis plumosis, supra albis versus marginem fulvis, crebre vestitus. Oculi postici sat magni, subæquales, in lineam validissime recurvam dispositi, medii inter se quam a lateralibus evidenter remotiores. Oculi antici, prope marginem clypei siti, medii lateralibus paulo majores. Area oculorum mediorum vix longior quam latior et antice quam postice non multo angustior. Abdomen in parte prima validissime tumidum, apice mucronibus binis grossis obtusis, leviter divaricatis et antice penicillatis munitum, postice longe declive attenuatum et subacuminatum, subtus in regione ventrali convexum, nigricans, fulvo ferrugineoque pubescens, in declivitate anteriore dilutior et linea media fusca longitudinali notatum, in declivitate posteriore linea media fusca tenuiore et maculis albis parvis biseriatis notatum, utrinque in partibus lateralibus macula nigricanti subrotunda ornatum. Pedes valde inæquales: pedes 1ⁱ paris reliquis multo longiores, femore patella tibiaque crassiore, fusei, femore subtus dilutior et intus prope medium subannulato, tibia ad basin dilutior, ad apicem leviter incrassata et supra et subtus setis longis crassis nigris rufulisque cristam formantibus ornata, patella supra ad apicem setis similibus paucis munita, metatarso luteo, gracili et recto. Pedes sex posteriores obscure fulvi, plus minus fusco-variati, cuncti ferrugineo-pubescentes et pilis plumosis albis conspersi; tibia 2ⁱ paris supra ad apicem leviter cristata, metatarso 4ⁱ paris in dimidio basilari fulvo, depresso et calamistro munito, in dimidio apicali fusco et recto. Vulva processu depresso retro-directo apice bifido munita.

♂. Long. 3.2 mm.—Cephalothorax latius ovalis, postice et præsertim antice magis attenuatus, nigricans, linea media testacea integra sectus, pilis plumosis fulvis parce munitus. Abdomen anguste oblongum, nec elevatum nec mucronatum, ad marginem anticum minute incisum, nigricans, plus minus fulvo-testaceo variatum. Pedes longiores, tibiis 1ⁱ paris sat gracilibus longis et leviter arcuatis, haud cristatis sed superne usque ad basin aculeis fulvis pellucentibus numerosis et fere inordinatis insigniter munitis. Pedes-maxillares brevissimi, luridi, patella tibiaque nigris.

Var. β. Cephalothorax obscure fulvus, vittis duabus fuscis antice evanescentibus notatus, pilis plumosis in medio albis in lateribus coccineis vestitus. Abdomen pallide fulvum, fulvo-aurantiaco

pubescens et parce albo-variaturum. Pedes fulvi, antici vix infuscati, cristis tibialibus fulvis.

Var. γ . *Nigrum, cephalothorace prope marginem posticum minute testaceo-lineato, pilis plumosis obscure fulvis vestito et pilis albis paucis lineam mediam lineamque marginatam designantibus ornato. Abdomine in declivitate posteriore punctis albis paucis biserialis ornato. Metatarso 1ⁱ paris in parte basali luteo, pedum sex posterioribus femoribus prope apicem, tibiis ad basin, metatarsis ad basin, in medio atque ad apicem anguste testaceo-annulatis.*

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Commun dans toute l'île.

11. MIAGRAMMOPES SCOPARIUS, sp. nov.

♀. Long. 6 mm.—*Cephalothorax ater, ad marginem clypei anguste testaceus, pilis plumosis pronis fulvo-nitidis dense vestitus, multo longior quam latior, antice posticeque truncatus, fere parallelus, sed antice ad oculos abrupte latior, pone oculos leviter transversim impressus. Oculi longe ante medium siti, aequales, medii inter se quam a lateralibus multo remotiores, sed spatio inter medios et laterales diametro oculi plus triplo latiore. Abdomen fulvum, supra albido-pubescent et vitta media obscuriore fulvo-pilosa, postice sensim ampliata et utrinque minute nigropunctata, notatum, subtus albido-pilosum, minute nigro-quadrupunctatum et utrinque, paulo ante medium, macula majore subrotunda nigra notatum, longissimum et subparallelum, antice recte sectum, postice supra mamillas brevissime productum et rotundum. Partes oris pedesque obscure fulvo-olivacea; pedes antici late nigricanti-variati, postici patellis metatarsisque supra infuscatis. Pedes antici reliquis multo longiores et robustiores, femoribus tibiisque validis et cylindraceis, tibiis inferne longius fulvo-pilosis, metatarsis cylindraceis leviter curvatis et versus apicem attenuatis et supra et extus pilis longis erectis nigris rufisque mixtis cristam duplicem formantibus ornatis sed ad apicem brevius albo-pilosis; metatarso 4ⁱ paris tibia fere duplo brevior, paulo crassior supra longe excavato et calamistro tertiam partem apicalem articuli attingente munito, subtus cum tarso spinis obtusis et leviter clavatis numerosis et regulariter seriatis munito.*

♂. Long. 4.5 mm.—*Cephalothorax brevior et antice latior, sed postice sensim attenuatus. Abdomen brevius, nigricans, fulvo-pilosum, vitta media parum expressa, confuse testaceo-marginata. Pedes antici haud cristati, rufuli supra nigricantes, tibiis supra aculeis validis acutis et leviter lanceolatis biserialis (12-8) valde armatis, metatarsis aculeis debilibus parcius munitis, metatarsis 4ⁱ paris nigris subteretibus et rectis. Pedes-maxillares brevissimi, fulvo-rufuli, femore crasso et brevi valde curvato, patella tibiaque circiter æquilongis, tibia ad apicem processu fulvo minuto et obtuso supra munita, tarso bulboque subglobosis.*

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2. *Araneæ veræ ecribellatæ*.1. Familia *DYSDERIDÆ*.12. *ARIADNE SOLITARIA*, sp. nov.

♀. Long. 8 mm.—*Cephalothorax* ovatus, pallide fusco-piceus, subtilissime coriaceus, nitidus, parce setosus. Oculi sat magni et ovati, subæquales (laterales antici reliquis paulo majores), medii inter se juxta contigui, utrinque laterales contigui, spatium inter medios et laterales diametro oculi non multo latius. Clypeus oculis lateralibus anticis angustior. Abdomen oblongum, teretiusculum, supra atro-violaceum, subtus et in lateribus, præsertim antice, fulvo-testaceum, cinereo-pubescens. Chelæ breves et robustæ, fusco-piceæ, nitidæ, nec rugatæ nec rugosæ. Sternum pallide fusco-rufescens nitidum. Pedes sat breves, luridi, metatarsis tarsisque anticis infuscatissimis, pedes antici postici longiores et robustiores, femore 1ⁱ paris apice incrassato supra aculeis tribus, intus aculeis binis (inferiore altero multo longiore et leviter sinuoso) armato; patella mutica, tibia et intus et extus aculeis parvis tribus uniseriatis et subtus aculeis longioribus 4-4 armata, metatarso subtus aculeis similibus sed inæqualibus 6-6 instructo, sed aculeis lateralibus carente; tibia 2ⁱ paris intus aculeis lateralibus parvis tribus extus aculeo minutissimo unico et subtus aculeis longis 4-4 armata, tibia 3ⁱ paris aculeis binis uniseriatis, metatarso aculeis binis uniseriatis et apicalibus binis subtus munitis. Pedes 4ⁱ paris omnino mutici. Pedes-maxillares breves et robusti, fulvi, tarso infuscatissimo apice acuminato, tibia tarsoque intus sat numerose et fere inordinate aculeatis.

Ab *A. pennsylvanica*, C. Koch (*bicolore*, Hentz), cui affinis est, differt oculis oblongis et minus disjunctis, femore antico apice pluriaculeato, tibiis anticis aculeis inferioribus et lateralibus armatis (in *A. pennsylvanica* femore uniaculeato et tibiis aculeis inferioribus tantum armatis).

Insula Sancti Vincentii.

"Baronallie, near sea-level, open valley; under rubbish."—*H. H. S.*

2. Familia *OONOPIDÆ*.Gen. *DYSDERINA*, nov. gen.

Oonops, Keyserling (ad part.).

A. Gamasomorpha, Karsch, cui affinis est, differt oculis posticis inter se juxta contiguis et lineam rectam formantibus, mediis lateralibus majoribus, oculis anticis reliquis oculis majoribus et spatio diametro oculi evidentissime angustiore inter sese separatis, clypeo oculis anticis angustiore, sterno lato sed postice magis attenuato et truncatura postica coxis angustiore, scutis abdominalibus dorsali et præsertim ventrali postice plus minus abbreviatis et mamillas haud attingentibus, pedibus longioribus, coxis

cunctis longioribus quam latioribus et cylindraceis, tibiis metatarsisque anticis et sæpe femoribus aculeis longis pronis biseriatis ordinatis subtus instructis.—*Pedes-maxillares maris femore patella tibiaque gracilibus et teretibus, tarso bulboque maximis, ovatis, apophysi apicali parva instructis.*

Typus hujus generis est *Oonops principalis*, Keyserling.

13. *DYSDERINA PRINCIPALIS*, Keyserling. (Plate XLII. fig. 1.)

Oonops principalis, Keyserl. Verh. z.-b. Ges. Wien, 1881, p. 296.

♀. Long. 4 mm.—*Cephalothorax fusco-purpureus, subniger, coriaceo-rugosus, spatio medio et in lateribus zonis radiantibus latis et parum regularibus lævibus et nitidis notatus. Area oculorum compactilis, latitudinem frontem fere totam occupans. Oculi postici subæquales, desuperne visi, lineam subrectam designantes, medii inter se juxte contigui, a lateralibus viâ separati. Oculi antici posticis paulo majores, subrotundi, spatio diametro oculi circiter duplo angustiore inter sese distantes. Clypeus leviter depressus et tenuiter marginatus, oculis anticis circiter æquilatus. Scuta abdominalia fusco-purpurea, lævia et nitidissima, dorsale magno tertiam partem apicalem abdominis superante, ventrale medium superante, tenuissime marginato, postice recte secto, antice in pediculo transversim carinulato. Sternum rufulum, ad marginem grosse et parce granosum et in medio carinulis nigris flexuosis areolato-cancellatum. Pedes obscure fulvo-rufuli, mediocres, femoribus sat robustis et compressis, anticis eartus aculeis seriatis tribus et intus, in parte apicali, aculeis binis instructis, tibiis inferne leviter deplanatis et aculeis longis et pronis, biseriatis 4-5, metatarsis aculeis similibus 2-2 armatis.*

♂. Long. 3.5 mm.—*Femina subsimilis, sed scutis abdominalibus majoribus in dorso fere omnino obtectis. Pedes-maxillares lutei, femore sat crasso, arcuato et clavato, tibia patella paulo longiore, teretiuseculo, bulbo magno, ovato.*

Insula Sancti Vincentii.

Cette espèce, décrite de Colombia par Keyserling, se trouve aussi au Vénézuëla, où elle est commune.

14. *DYSDERINA PRINCEPS*, sp. nov.

♀. Long. 4 mm.—*Cephalothorax nigro-purpureus, uniformiter valde et crebre coriaceo-granulosus. Area oculorum compactilis et latitudinem frontem fere totam occupans. Oculi postici subæquales, contigui, in lineam rectam dispositi. Oculi antici posticis paulo majores, subrotundi, spatio diametro oculi fere duplo angustiore inter sese separati. Clypeus oculis anticis circiter æquilatus, leviter depressus et tenuiter marginatus. Scuta abdominalia nigro-purpurea, parce et crasse albido-pilosa, dorsale opaco, magno, tertiam partem apicalem superante, ventrale nitido, dimidium ventrem multo superante, haud marginato et postice recte secto, antice in pediculo tenuiter transversim striolato. Sternum fusco-purpureum, ad marginem parce et grosse granosum, in*

medio carinis flexuosis parum distincte areolatum. Pedes fulvo-rufuli ut in precedente aculeati.

A *Dysderina principali*, Keyserl., cui valde affinis est, præsertim differt cephalothorace uniformiter granoso et scuto abdominali superiore opaco.

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15. *DYSDERINA SPINIGERA*, sp. nov. (Plate XLII. figs. 2, 3.)

♀. Long. 4.5 mm.—*Cephalothorax pallide rufescens, versus marginem leviter infuscatus, crebre coriaceo-rugosus, latus et convexus. Area oculorum compactilis, latitudinem frontalem paulo angustior. Oculi sat magni, subæquales, ovati et inter se juxte contigui, quatuor postici in lineam plane rectam, duo antici (reliquis paulo majores), spatio diametro oculi angustiore sejuncti. Clypeus oculis anticis circiter æquilatus. Scuta abdominalia fulvo-aurantiaca, lævia et nitida, dorsale ovatum, dimidiam longitudinem non multo superans, ventrale rimam epigastricam non multo superans et postice late rotundum, antice, prope petiolum, transversim striatum. Sternum rufulum, tenuiter et crebre coriaceo-rugosum, et granulis paulo majoribus conspersum. Pedes robusti et parum longi, luridi, femore 1ⁱ paris subtus, ad marginem exteriorem, aculeis tribus (1 et 2 longissimis), ad marginem interiorum, in parte apicali aculeis tribus paulo minoribus armato; femore 2ⁱ paris utrinque aculeis multo minoribus binis armato, tibiis anticis subtus parvulum depressis et aculeis longissimis pronis et leviter elevatis 5-5 et metatarsis aculeis similibus 3-3 valde instructis.*

♂. Long. 4 mm.—*Femine fere similis, sed scutis abdominalibus dorsali et ventrali fulvo-rufulis, multo majoribus, apicem fere attingentibus et postice subtruncatis, sterno convexiore, coriaceo sed antice, pone partem labialem, lævi et nitido, pedum anticorum aculeis debilioribus. Pedes-maxillares lutei, femore sat gracili, patella et tibia circiter æquilongis et leviter ovatis, tarso bulboque maximis, albidis et subpellucetibus, reliquis articulis simul sumptis multo longioribus et crassioribus, bulbo late ovato sed sensim attenuato atque apophysi sat robusta, rufula apice nigra, contorta apice oblique secta et acuta instructo.*

Insula Sancti Vincentii.

Se trouve aussi au Vénézuëla, où il est très répandu.

Gen. *CINETOMORPHA*, nov. gen.

Cephalothorax breviter ovatus et, præsertim postice, convexus. Area oculorum latitudinem frontalem totam occupans. Oculi quatuor postici in lineam valde procurvam, medii inter se juxte contigui et laterales majores, laterales a mediis distincte separati. Oculi antici reliquis paulo majores et spatio diametro oculi latiore inter se distantes. Clypeus oculis anticis latior, rarius æquilatus. Abdomen subglobosum vel breviter ovatum, scuto dorsali magno omnino obiectum, scuto ventrali magno, sed

mamillas laud attingente et postice subrecte secto; mamillæ inferne semicirculo coriaceo cinctæ. Sternum latum, sed paulo longius quam latum, postice attenuatum et inter coxas posticas recte sectum. Pedes breves et robusti, omnino mutici, coxis cunctis subglobosis, femoribus, præsertim anticis, compressis et subclavatis, tarsis minutis metatarsis brevioribus. Pedes-maxillares maris femore robusto et subclavato, tibia patellæque brevibus et subæquis, bulbo mediocri sed apophyse apicalem longissimam et intus curvatam gerente.

Typus hujus generis est *C. puberula*, E. Sim.

16. CINETOMORPHA SIMPLEX, sp. nov.

♀. Long. 3 mm.—*Cephalothorax fulvo-aurantiacus, breviter ovatus et convexus, antice antennatus et obtusus, omnino crebre et subtiliter coriaceo-granulosus et in medio setis nigris paucis erectis munitus. Abdomen magnum, scuto dorsali rufulo, uniformiter subtiliterque coriaceo, minute et parcissime impresso, et pilis luteis sat longis et crassis parce vestito, scuto ventrali sublævi antice in regione epigasteris leviter ruguloso. Sternum omnino subtiliter coriaceo-rugosum. Pedes breves, fulvo-aurantiaci.*

Insula Sancti Vincentii.

A *C. silvestri*, E. Sim., cui valde affinis est, imprimis differt pilis abdominis crassis et luteis.

Gen. PELICINUS, nov. gen.

Cephalothorax sternumque fere ut in Gamasomorpha, sed cephalothorace humiliore. Area oculorum latitudinem frontalem fere totam occupans. Oculi cuncti æquales, quatuor postici in lineam valde procurvam ordinati, medii inter se juxte contigui, sed a laterilibus distincte separati. Oculi antici spatio diametro oculi latiore inter se distantes. Clypeus oculis anticis latior. Abdomen anguste oblongum, scuto dorsali omnino obtectum, scuto ventrali abbreviato dimidium ventrem vix superante. Mamillæ laud coriaceo-cinctæ. Pedes sat longi, coxis cunctis subglobosis, femoribus ad basin compressis, metatarsis tarsisque longis et gracilimis. Pedes-maxillares maris femore gracili, patella tibiaque circiter æquilongis et teretiusculis, bulbo magno, globoso et depressiusculo, apophysi media sat longa instructo.

17. PELICINUS MARMORATUS, sp. nov. (Plate XLII. fig. 4.)

♀. Long. 3 mm.—*Cephalothorax flavo-rufescens, subtiliter et crebre coriaceus et in medio pilis albidis crassis paucis munitus, area oculorum nigro-cincta. Oculi æquales, postici in lineam valde procurvam dispositi, antici ovati atque obliqui. Sternum luteum, subtiliter coriaceum et opacum. Abdomen sat anguste ovatum, scuto dorsali nitido sed subtilissime coriaceo et pilis albidis crassis et longis consperso, obscure fulvo-livido, maculis magnis infuscatissimis parum expressis et subquadratis quadriseriatim ordinatis ornato; scuto ventrali rufulo, leviter coriaceo et piloso, abbreviato, postice*

paululum attenuato-truncato et dimidium ventrem non multo superante. Pedes omnino luridi, crasse cinereo-pilosi, metatarsis tarsisque, præsertim posticis, gracillimis et longis.

- ♂. Long. 3 mm.—*Femine similis. Pedes-maxillares lutei, femore gracili sat longo, patella tibiaque circiter æquilongis et cylindraceis, bulbo maximo globoso et depressiusculo, apophysii media sat longa et leviter curvata munito.*

Insula Sancti Vincentii.

Gen. ΟΡΟΡÆΑ, nov. gen.

Cephalothorax longus, oblongus et humilis, supra rectus et deplanatus, postice abrupte declivis et truncatus. Area oculorum latitudinem frontalem fere totam occupans. Oculi quatuor postici, desuperne visi, juxta contigui et lineam leviter recurvam formantes, medii lateralibus majores. Oculi antici reliquis majores, inter se angustissime separati. Clypeus oculis anticis multo angustior. Sternum magnum, longe ovatum, postice obtusum. Abdomen scutis dorsali et ventrali omnino obtectum. Pedes breves et robusti, mutici, coxis globosis, femoribus compressis et late clavatis, tarsis anticis metatarsis non multo brevioribus. Pedes-maxillares maris insignes, femore parvo et clavato, patella maxima late ovata, tibia minutissima nodiformi, tarso sat longo teretiusculo, bulbo parvo dentiformi ad apicem tarsi inserto.

18. ΟΡΟΡÆΑ DESERTICOLA, sp. nov. (Plate XLII. fig. 5.)

♀. Long. 2·7 mm.—*Cephalothorax fulvo-rufescens, in medio late dilutior, levis et pilis albidis crassis paucis ornatus, in lateribus subtilissime et crebre striolatus, area oculorum anguste nigro-cincta. Oculi postici contigui, medii lateralibus paulo majores. Oculi antici reliquis majores, spatio diametro oculi plus duplo angustiore inter sese sejuncti. Sternum fulvum, læve, nitidissimum. Scuta abdominalia fulvo-aurantia, nitida, sed minute et parcissime rugosa et pilis albis sat longis conspersa. Pedes-maxillares pedesque omnino lutei.*

♂. Long. 2·5 mm.—*Femine subsimilis. Pedes-maxillares lutei, femore parvo, compresso et minute clavato, patella maxima, late ovata, ad basin valde et retro convexa, tibia minutissima, nodiformi, tarso tibia longiore cylindraceo, bulbo ad apicem tarsi inserto, brevi obtuso, leviter curvato et dentiformi.*

Insula Sancti Vincentii.

O. deserticola, E. Sim., habite presque toutes les régions chaudes et désertiques du globe ; je l'ai trouvée dans le Sahara Algérien, en Egypte, en Arabie, aux Iles Philippines et au Vénézuëla.

Une espèce très voisine, du Pérou, a été décrite par Keyserling sous le nom d'*Oonops cupidus* (Verh. z.-b. Ges. Wien, 1881, p. 298, t. xi. f. 19), mais la figure que Keyserling a donnée de la patte-mâchoire du mâle indique des différences ; c'est ainsi que l'article du tarse paraît beaucoup plus long et le bulbe au contraire plus petit et terminé en pointe fine contournée.

Gen. TRIÆRIS, nov. gen.

Cephalothorax breviter ovatus, postice sat convexus et fere abrupte declivis. Oculi postici contigui in lineam leviter recurvam ordinati, medii lateralibus paulo majores. Oculi antici spatio diametro oculi latiore inter se distantes. Clypeus oculis anticis paulo latior. Sternum late cordiforme, postice attenuatum, sed inter coxas posticas late truncatum. Abdomen longum, scuto inferiore brevi, rimam epigasterem haud superante, scuto dorsali abdomine angustiore, longe ovato, medium dorsum non multo superante. Pedes sat breves et robusti, patellis tibiis metatarsisque 1ⁱ paris inferne setis rigidis spiniformibus biseriatis instructis, patellis 1ⁱ paris reliquis patellis multo longioribus et tibiis non multo brevioribus.

19. TRIÆRIS STENASPIS, sp. nov.

♀. Long. 2.5 mm.—*Fulvo-aurantius, nitidus, sterno coxis tarsisque dilutionibus, oculis anguste nigro-cinctis, abdomine, plagula dorsali excepta, albo-testaceo. Cephalothorax ovatus, postice convexus, levissimus. Area oculorum fronte paulo angustiore. Abdomen supra plagula aurantiaca nitida anguste ovata et antice sensim angustiore, medium superante notatum, subtus regione epigasteris fulva, leviter coriacea, et, pone aperturam genitalem, minute fusco-notata. Sternum laeve et nitidum. Pedes parum longi, femoribus late clavatis, patellis 1ⁱ paris insigniter longis subtus setis rigidis spiniformibus binis armatis, tibia 1ⁱ paris subtus setis similibus biseriatis munita. Pedes-maxillares graciles et parce setosi.*

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Se trouve aussi au Vénézuëla (Caracas, San Esteban).

Gen. SCAPHIELLA, nov. gen.

Cephalothorax oblongus, fere ut in Opopæa, sed postice leviter acuminatus et valde declivis. Oculi postici contigui, in lineam leviter procurvam, rarius rectam dispositi, æqui vel sæpius medii paulo majores; oculi antici reliquis majores, inter se juxte contigui, rarius anguste separati. Clypeus oculis anticis latior et leviter porrectus. Sternum late cordiforme, convexus, postice attenuatum, sed inter coxas posticas sat late truncatum. Pedes breves et robusti, omnino mutici, coxæ cunctæ subglobosæ.—♀. Abdomen longe cylindraceum, scuto dorsali carens, scuto ventrali maximo, mamillas attingente, postice truncato et leviter emarginato, utrinque valde ampliato et partes laterales omnino amplectente, munitum. Pedes-maxillares breves et robusti, femore clavato, tarso dilatato et ovato, sed apice acuminato, intus ad basin fasciculo setarum munito.—♂. Abdomen longe ovatum, depressiusculum, scuto ventrali scutoque dorsali fere omnino obiectum.

20. SCAPHIELLA CYMBALLARIA, sp. nov.

♀. Long. 2.5 mm.—*Cephalothorax ovatus, lute fulvo-rufescens,*

versus marginem sensim infuscatus, in medio lævis et nitidissimus, in lateribus et postice, in declivitate, crebre coriaceo-granulosus. Oculi postici contigui, desuperne visi, in lineam leviter procurvam ordinati, medii lateralibus paulo majores. Oculi antici reliquis multo majores et inter se subcontigui. Sternum scutumque abdominale rufescentia, lævia et nitidissima, marginibus scuti haud coalescentibus, et abdomen supra livido-membranaceum. Pedes flavo-aurantii, parce pilosi, sat longi, femoribus compressis et clavatis, metatarsis anticis tarsis multo longioribus. Pedes-maxillares breves et robusti, femore lato, subclaviformi, tibia patella cequilonga, tarso ampliata, ovato sed acuminato, intus ad basin setis robustis nigris fasciculum formantibus munito.

♂. Long. 2.2 mm.—Cephalothorax scutisque ut in femina. Abdomen anguste oblongum, scuto dorsali fulvo-nitido parce et longe albo-piloso, scutoque ventrali etiam fulvo-nitido, mamillas haud attingente, sed medio superante, fere omnino obtectum. Chelæ ad basin leviter prominentes et acuminatæ. Pedes-maxillares femore robusto et subclaviformi, patella tibiaque brevibus et subæquis, bulbo maximo, late ovato, stylo libero tenui et sat longo instructo.

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Se trouve aussi au Vénézuëla.

Gen. ISCHNASPIS, nov. gen.

Cephalothorax breviter ovatus, modice convexus. Area oculorum latitudinem frontalem totam occupans. Oculi sat magni, quatuor postici inter se juxte contigui et lineam leviter procurvam formantes. Oculi duo antici reliquis paulo majores et inter se contigui. Clypeus oculis anticis angustior. Sternum late cordiforme, sed postice attenuatum et apice obtusum. Abdomen ovatum, subtile haud scutatum, supra, in parte basali, scuto angusto et ovato munitum. Pedes longi, coxis cunctis paulo longioribus quam latæ, femoribus compressis et robustis, tibiis metatarsisque quatuor anticis subtile valde biseriatis aculeatis.—

♂. Cephalothorax gibbosus, partes oris valde singulares, lamina apice acuminatæ, pars labialis quadrata. Pedes-maxillares semper nigri, minuti et valde curvati, articulis cunctis subæqualibus.

21. ISCHNASPIS PELTIFER, sp. nov.

♀. Long. 3.5 mm.—Cephalothorax fulvo-olivaceus vel rufescens, versus marginem leviter infuscatus, lævis et nitidus, area oculorum anguste nigro-cincta. Abdomen ovatum, album, supra in parte basali scuto fusco-olivaceo nitido anguste parallelo et apice rotundo, medium dorsum superante munitum. Chelæ leviter infuscatæ. Sternum fulvo-nitidum. Pedes omnino luridi, femoribus anticis intus, in parte apicali, aculeis longis binis armatis, tibiis inferne aculeis longissimis et pronis 4-3, metatarsis aculeis similibus 2-2 instructis. Pedum-maxillarum tibia

patella longior, tarsus gracillimus, leviter curvatus, tibia et patella simul sumptis longior.

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Espèce dont l'habitat est très étendu, car nous l'avons reçue de Sierra Leone dans l'Afrique occidentale et nous l'avons trouvée aux Iles philippines, où le genre est en outre représenté par une seconde espèce.

22. OONOPS SPINIMANUS, sp. nov. (Plate XLII. fig. 6.)

♀. Long. 3 mm.—*Pallide luridus, subpellucens, lævis et nitidus, oculis anguste nigro-cinctis, abdomine supra leviter obscuriore et livido, subtus, prope mamillas, utrinque minute fusco-notato. Cephalothorax breviter ovatus, postice altus et sat abrupte declivis, antice sensim et leviter declivis, fronte angusta. Area oculorum latitudinem frontalem fere totam occupans. Oculi sub-æquales (laterales antici reliquis vix majores), medii inter se juxte contigui et intus subrecti, laterales subrotundi, antici spatio diametro oculi paulo angustiore inter sese distantes. Pedes-maxillares femore subtus setis rigidis tribus uniseriatis, patella intus, ad apicem, leviter dilatata et setis spiniformibus longis et erectis binis armata, tibia leviter curvata, intus setis similibus uniseriatis 3 vel 4 (basilari reliquis longiore) et subtus et supra setis minoribus instructa, tarso fere similiter setoso. Tibia metatarsoque 1ⁱ paris setis spiniformibus pronis seriatis subtus munitis.*

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Se trouve aussi au Vénézuëla.

23. OONOPS GLOBIMANUS, sp. nov. (Plate XLII. fig. 7.)

♀. Long. 2.3 mm.—*Pallide luridus, subpellucens, oculis angustissime nigro-cinctis, abdomine albo-testaceo. Cephalothorax breviter ovatus, postice altus et sat abrupte declivis, fronte angusta. Area oculorum latitudinem frontalem fere totam occupans. Oculi ut in O. spinimano, E. Sim., ordinati. Pedes-maxillares graciles, tibia metatarsoque, præsertim intus, setis rigidis, sat numerosis et fere inordinatis munitis. Pedes sat longi, tibiis metatarsisque anticis subtus setis rigidis biseriatis munitis, tibiis metatarsisque posticis parce aculeatis.*

♂. Long. 2.3 mm.—*Feminae similis, sed pedibus paulo longioribus. Pedes maxillares lutei, bulbo albo processibus apicalibus parvis fuscis; femore gracili subrecto; patella tibiaque circiter æquilongis, tibia leviter depressa; bulbo maximo, reliquis articulis cunctis longiore et plus triplo crassiore, ad basin, præsertim postice, valde convexo, ad apicem valde attenuato et apophysibus duabus sat parvis munito, apophysi 1^a setiformi et curvata, 2^a apice malleiformi.*

Ab *O. pulchro*, Templ., cui affinis est, præsertim differt aculeis seriatis tibiarum anticarum minus distinctis, pedibus posticis evidenter aculeatis, bulbo maris majore, etc.

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Se trouve aussi au Vénézuëla.

24. *OONOPS PULICARIUS*, sp. nov. (Plate XLII. fig. 8.)

♀. Long. 2.3 mm.—*Lurido-rufescens, oculis angustissime nigro-cinctis, abdomine albo-testaceo. Cephalothorax breviter ovatus, postice altus et abrupte declivis, fronte angusta et recte truncata. Area oculorum latitudinem frontalem totam occupans. Oculi magni, subaequales (laterales postici reliquis paulo minores), medii inter se juxta contigui, ovati et intus recti, laterales subrotundi, oculi antici spatio diametro oculi latiore inter sese distantes. Pedes-maxillares graciles, inordinate pilosi. Tibiae quatuor antice inferne leviter deplanatae et aculeis biserialis 5-5, longissimis, pronis, fulvis et subpellucentibus, sed ad basin minute et singulariter fusco-tuberculatis, armatae, metatarsi aculeis similibus 3-3 muniti. Pedes postici parce et tenuiter aculeati.*

♂. Long. 2.2 mm.—*Feminae subsimilis, sed oculis anticis inter sese minus disjunctis, pedibus longioribus, anticis vix distincte aculeatis. Pedes-maxillares fulvo-castanei, sat breves, femore crasso, supra, praesertim ad apicem, convexo, patella parva et nodosa, tibia patella longiore et crassiore, cylindracea ad basin atque ad apicem brevissime et abrupte constricta, tarso tibia minore breviter acuminato, bulbo longo sed angusto, apice spinis duabus nigris parallelis et subaequis munito.*

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Se trouve aussi au Vénézuëla.

25. *OONOPS FIGURATUS*, sp. nov. (Plate XLII. fig. 9.)

♀. Long. 2.5 mm.—*Cephalothorax nitidissimus, fulvo-rufescens, versus marginem sensim infuscatus, oculis anguste nigro-cinctis. Abdomen supra atrum, leviter micanti-tinctum et lineolis nigris laxè clathratum, antice macula subcruciata, prope medium vitta transversa lata valde dentata et inequali, albidis, ornatum, subtus albo-testaceum. Partes oris, sternum pedesque luteo-rufescentia, nitida. Oculorum area sat transversa, latitudinem frontalem fere totam occupans. Oculi medii rotundi, inter se juxta contigui, laterales a mediis distincte separati, anticus postico paulo major, spatium inter laterales anticos diametro oculi evidenter latius. Pedes-maxillares breves, femore sat robusto, tibia metatarsoque pilis rigidis sat brevibus et numerosis supra munitis. Pedes omnino mutici parce pilosi.*

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Se trouve aussi au Vénézuëla.

Gen. *STENONOPS*, nov. gen.

Ab Oonopi differt cephalothorace longius ovali, humiliore et supra deplanato, sterno longiore postice minus attenuato et latius obtuso, coxis posticis subglobosis, latius separatis, area oculorum parva, dimidium latitudinis frontis vix occupante, oculis posticis parvis et contiguis in lineam plane rectam ordinatis, oculis anticis reliquis paulo majoribus et spatio diametro oculi saltem haud

latiore inter se distantibus, clypeo angustissimo vix ullo, pedibus anticis patellis insigniter longis tibiis non multo brevioribus.

26. *STENOONOPS SCABRICULUS*, sp. nov.

♂. *Long. 2 mm.*—*Cephalothorax* rufulo-castaneus, ad marginem infuscatus, longus et humilis, crebre et uniformiter coriaceo-granulosus et pilis pronis albidis conspersus. Area oculorum mediocris, fronte angustior. Oculi antichi reliquis majores, subrotundi et inter se angustissime separati, subcontigui. Abdomen cylindraceum, albo-testaceum, pilis crassis brevibus, albo-nitidis conspersum. Sternum obscure fulvo-rufulum, tenuiter coriaceo-granulosum. Pedes breves, robustissimi, obscure fulvo-rufuli. Pedes-maxillares fulvi, crasse cinerco-setosi; femore sat gracili et brevi, patella tibiaque brevibus et circiter æquilongis, tarso bulboque ovatis, ad apicem oblique truncatis, apophysi apicali parva, fulva, arcuata et obtusa munitis.

Insula Sancti Vincentii.

Se trouve aussi au Vénézuëla.

3. Familia *LEPTONETIDÆ*.

Le groupe des *Leptonetides* se place entre les *Oonopides* et les *Sicariides*, auxquels il ressemble par la structure de ses organes sexuels et celle de ses griffes tarsales portées par un onychium.

Il s'éloigne des *Oonopides* par l'absence de la seconde paire de stigmates épigastriques et par ses filières inférieures séparées par un long *conulus*.

Il diffère des *Sicariides* par ses chelicères longues à marge supérieure dentée et à crochet long, par sa pièce labiale libre, par ses lames maxillaires peu inclinées et jamais conniventes.

Les *Leptonetides* sont des araignées lucifuges, dont les yeux disparaissent quelquefois (*Telema*? Sim.); quand ils existent ils sont au nombre de six. Les yeux forment tantôt un groupe compact transverse analogue à celui des *Orchestina* (*Ochyrocera*, *Psilodermes*, *Theoclia*), tantôt ils sont répartis en deux groupes, le premier formé de quatre yeux et le second de deux (*Leptoneta*).

Gen. *OCHYROCERA*, nov. gen.

Cephalothorax non multo longior quam latus, utrinque ample rotundus, clypeo porrecto, lato, dimidium longitudinem cephalothoracis circiter æquante. Oculi quatuor antichi in lineam plane rectam ordinati, laterales a mediis angustissime separati, utrinque laterales contigui et angulum acutum formantes. Pars labialis apicem versus leviter attenuata. Pedes longi, femoribus ad basin sensim incrassatis et longe fusiformibus, reliquis articulis gracillimis et flexuosis.—♂. Pedes-maxillares valde singulares, femore gracili et longo, patella minuta nodiformi, tibia longa, incrassata, atque ovata, tarso apice gracillimo, longissimo et recto, bulbo anguste ovato, spina longissima et arcuata prædito.

27. *OCHYROCERA ARIETINA*, sp. nov. (Plate XLII. fig. 10.)

♀. Long. 3.5 mm.—*Cephalothorax* *luridus*, *vitta media lata integra*, in parte thoracica minute dentata, et utrinque *vitta marginali latissima nigricantibus notatus*, *clypeo leviter infuscato*, et sub oculis minute trilineato. Oculi medii subrotundi, inter se juxte contigui, utrinque oculi laterales bini, mediis paulo minores, elongati et inter se oblique contigui, sed a mediis anguste separati. Clypeus area oculorum plus triplo latior, valde proclivis, ad marginem late rotundus et leviter convexus. Abdomen sat anguste ovatum, convexum et postice acuminatum, nigricantilividum, plica epigasteris lata et minute ciliata, remota, prope medium ventrem sita. Sternum et partes oris nigricanti-livida, levia. Pedes livido-violacei, tibiis metatarsisque ad apicem minutissime testaceo-notatis, longissimis fere ut in *Pholco*, femoribus versus basin valde incrassatis et longe fusiformibus, reliquis articulis gracillimis, metatarsis tarsisque filiformibus et flexuosis.

♂. Long. 3 mm.—Femine similis. Pedes-maxillares fuscolividi; femore longo, gracili, versus basin leviter attenuato et arcuato; patella minutissima nodiformi, tibia patella plus triplo longiore, latiore et longe ovata; tarso ad basin sat lato et ovato, ad apicem gracillimo, recto, et longissimo; bulbo breviter pediculado, sat anguste ovato et versus apicem sensim attenuato, spina terminali longissima apice acuta valde curvata et semicirculum formante insigniter instructo.

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28. *OCHYROCERA QUINQUEVITTATA*, sp. nov. (Plate XLII. fig. 11.)

♀. Long. 2.5 mm.—*Cephalothorax* testaceo-virescens, area oculorum nigra, postice lineas tres abbreviatas emittente, parte cephalica postice maculis sat magnis nigris et obliquis litteram V designantibus, parte thoracica lineis radiantibus nigris, ad marginem ampliatis et coalitis ornatis, clypeo infuscato. Oculi ut in precedenti, sed paulo majores. Clypeus angustior et minus porrectus, area oculorum vix duplo latior, ad marginem anticum, in medio, leviter excisus. Abdomen sat late ovatum, convexum et postice acuminatum, virescens, vittis transversis nigris quinque latis et arcuatis ornatum. Mamillæ nigrae. Sternum et partes oris fusco-virescentia, levia. Sternum latissime cordiforme. Pedes longi (sed breviores quam in precedenti), femoribus ad basin incrassatis, reliquis articulis filiformibus, testaceo-virescentes, femoribus, patellis, tibiis metatarsisque ad apicem minute nigricanti-annulatis in medio late et confuse infuscatis.

♂. Long. 2 mm.—Femine similis. Pedes-maxillares testaceo-virescentes, fere ut in precedenti, tarso multo brevior et obtuso, sed prope apicem extus spinam longam et rectam emittente, spina bulbi longissima curvato-angulosa.

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Gen. THEOCLIA, nov. gen.

Ab Ochrocera, cui affinis est, differt clypeo angustiore et obliquo, area oculorum multo minore, latitudine frontali multo angustiore, oculis parvis, quatuor anticis inter se juxte contiguis et lineam rectam formantibus, oculis lateralibus posticis pone anticos oblique sitis, pedibus brevioribus, posticis anticis evidenter longioribus, femoribus haud insigniter incrassatis, partibus oris brevioribus.

29. THEOCLIA RADIATA, sp. nov. (Plate XLII. fig. 12.)

♀. Long. 1.8 mm.—*Cephalothorax breviter ovatus, parum convexus, fulvo-olivaceus, fronte dilutior et lutea, parte cephalica lineis tribus, media exili, lateralibus triangulariter dilatatis, maculaque postica transversim triquetra, parte thoracica linea marginali exili lineisque radiantibus numerosis et abbreviatis nigricantibus, notatis. Area oculorum parva et transversa, latitudine frontali minor. Oculi conferti, medii minutissimi, laterales paulo majores inter se æqui et obliqui, spatium inter anticos diametro oculi circiter duplo latius. Clypeus area oculorum haud lator, leviter porrectus. Abdomen globosum, fusco-testaceum. Partes oris, sternum pedesque fulvo-olivacea. Pedes longi, omnino mutici. Pedes-maxillares graciles, fulvi, apice nigri.*

♂. *Femine similis. Pedes-maxillares lutei, sat longi; femore longo, gracili, versus basin angustiore; patella parva; tibia patella fere duplo longiore, leviter ovata; tarso angusto, cylindraceo, tibia circiter æquilongo; bulbo maximo subgloboso.*

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Se trouve aussi au Vénézuëla.

4. Familia SICARIIDÆ.

30. SCYTODES LONGIPES, Lucas. (Plate XLII. fig. 13.)

Scytodes longipes, Lucas, Ann. Soc. ent. France, 1845, p. 71, tab. i. f. 2.

Scytodes marmorata, Taczanowski, Hor. Soc. ent. Ross. x. 1873, p. 107.

Scytodes longipes, Keyserling, Verh. z.-b. G. Wien, 1877, p. 210, t. vii. f. 3.

Scytodes taczanowskii, Thorell, St. Rag. Mal. etc. iv. 1890, p. 301 (nota).

♀. Long. 7–8 mm.—*Cephalothorax breviter ovatus, postice sat convexus, sublaevis, parce et sat longe nigro-pilosus, luridus, valde nigro-variatus. Area oculorum macula nigra, postice breviter producta et truncata, pone oculos medios spatium longitudinale luteum et utrinque lineolam valde flexuosam includente oblecta, supra vittis latissimis valde appropinquatis et spatiis mediis luteis binis, antico subtriquetro postico ovato-transverso, tantum separatis, valde dentatis et sinuosis, et utrinque serie*

macularum lutearum valde inæqualium 5-6 includente notata, ad marginem utrinque maculis quatuor sinuoso-dilatatis et punctos luteos includentibus ornata. Margo clypei subrectus, utrinque vix convexus, haud prominulus. Oculi medii antici sat magni et rotundi, subcontigui, a margine clypei spatio diametro oculi fere duplo latiore sejuncti. Abdomen ovatum, albido-testaceum, supra valde nigro-striatum et punctatum, antice macula longitudinali apice utrinque dentata, prope medium macula longitudinali in medio leviter constricta, dein maculis transversis paulo arcuatis et subcontiguis tribus, postice spatio albidiorè immaculato, sed supra mamillas maculis minoribus seriatis trinis decoratum, subtus in regione epigasteris vittis nigris tribus, media latiore, lateralibus divaricatis, in regione ventrali lineis nigris quatuor, mediis postice convergentibus apice contiguis et manillas haud attingentibus, lateralibus interruptis et punctatis, ventre antice impressionibus binis magnis nigris et ovatis munito. Sternum inæquale, nigrum, antice, pone partem labialem, transversim luteum, macula media elongata antice posticeque tenuiter producta et utrinque maculis marginalibus luteis trinis notatum. Partes oris pedesque fulvo-lutei, laminae maxillares extus late nigro-marginatæ, chela in parte basali late nigra. Pedes longi et graciles, articulis cunctis (tarsis exceptis) valde et numerose nigro-punctatis et subannulatis, haud lineatis.

♂. *Long. 6-7 mm.*—*Cephalothorax humilior, pictura pallidiorè et confusiorè. Pedes multo longiores, apice gracillimi, minutissime et parcissime nigro-punctati, sed apice femorum patellisque nigris. Pedes maxillares breves et robusti; femore valido; patella vix longiore quam lato; tibia patella longiore subparallela; tarso tibia circiter æquilongo, ad basin fere æquilato, dein multo angustiorè et sensim attenuato, bulbo mediocri, lobo ovato, spina sat robusta, recta, lobo non multo longiorè et apicem tarsi haud superante.*

A *S. maculata*, Holmb., cui valde affinis est, imprimis differt pedibus fere inordinate nigro-punctatis (in *S. maculata* regulariter nigro-annulatis), ventre nigro-vittato et impressionibus ventralibus nigris atque ovato-longitudinalibus (in *S. maculata* fere semicircularibus et rufulis).

A *S. globula*, Nicolet, angulis clypei minus prominulis, pictura cephalothoracis et pedum, ventre vittato, sterno late nigro-clathrato (in *S. globula* puncto medio punctisque marginalibus trinis minutis notato), impressionibus ventralibus multo majoribus facile distinguenda.

Insula Sancti Vincentii.

Habite une grande partie de l'Amérique centrale et de l'Amérique méridionale.

31. SCYTODES HEBRAICA, sp. nov. (Plate XLII. fig. 14.)

♀. *Long. 6 mm.*—*Cephalothorax breviter ovatus, postice convexus, sublaevis, parce et sat longe nigro-pilosus, luridus, nigro-*

variatus: regione frontali transversim nigra, vitta dorsali latissima utrinque ramulos tres abbreviatos et truncatos emittente, antice, pone oculos medios, maculam parvam elongato-triquetram et pone oculos laterales utrinque maculam paulo majorem postice truncatam, dein lineam longitudinalem et in medio maculam magnam transversim ampliata et papilioniformem gerente, utrinque vitta marginali angusta et linea submarginali angustiore valde flexuosa interrupta et arcus tres designante. Margo clypei evidenter emarginatus, utrinque ad angulum convexus. Oculi medii mediocres, subcontigui. Clypeus obliquus, oculis mediis saltem duplo latior. Abdomen globosum, albido-testaceum, valde nigro-punctatum et maculis majoribus inaequalibus, saepe confluentibus, et zonas transversas formantibus decoratum, subtus inordinate nigro-marmoratum. Sternum fuscum, vitta media fulva sat angusta et apice haud attingente, notatum. Pars labialis fusca. Lamine testaceae, extus fusco-marginatae. Chelae testaceae, antice late fusco-plagiatæ. Pedes graciles et longi, coxis fulvis apicibus fuscis, femoribus nigricantibus annulis quatuor sat angustis pallide luridis ornatis, reliquis articulis fuscis, tibiis annulis binis luteis (altero subbasilari, altero subapicali) et metatarsis annulo basilari simili notatis. Pedes-maxillares breves et robusti, luridi, femore anguste nigro-biannulato, patella tibiaque ad apicem infuscatis.

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32. SCYTODES BAJULA, sp. nov. (Plate XLII. fig. 15.)

- ♀. Long. 4 mm.—Cephalothorax breviter ovatus, postice valde convexus, subtilissime coriaceus et parce nigro-pilosus, luridus et nigro-variatus: linea media exili apicem haud attingente, utrinque vittis dorsalibus latioribus binis, vitta interiore oculos medios attingente, postice abbreviata, leviter flexuosa et extus prope medium obtuse dentata, vitta exterior oculos laterales attingente inaequali, usque ad apicem ducta et extus ramulos tres sat angustos et longos emittente, utrinque linea marginali dentata lineaque submarginali valde flexuosa et saepe interrupta arcus tres designante. Margo clypei rectus, nec convexus nec emarginatus. Oculi antici sat magni, contigui. Clypeus oculis anticis circiter dimidio latior. Abdomen globosum, albo-testaceum, supra zonis transversis nigris latis et dentatis ornatum, subtus obscure testaceum, regione epigasteris nigra, regione ventrali parce nigro-punctata et postice maculis majoribus binis arcuatis munita. Sternum fuscum, antice, pone partem labialem, transversim luteum, dein linea media angusta sed apice triangulariter ampliata et utrinque maculis binis transversis luteis notatum. Chelae antice fuscae, ad apices testaceae. Pedes graciles, sat longi, obscure fulvi, coxis apicibus fuscis, femoribus anticis obscurioribus, late infuscatis et subannulatis, posticis ad apicem late fusco-annulatis, tibiis annulo medio annuloque apicali olivaceis vix expressis munitis. Pedes-maxillares breves et robusti, lutei, femore fere nigro, patella tibiaque late fusco-variatis.

♂. Long. 4 mm.—Femine subsimilis sed cephalothorace paulo humiliore, sterno antice latius testaceo et setis nigris spiniformibus erectis parce armato, pedibus multo longioribus, fere omnino luridis, femoribus 1ⁱ paris, prope medium utrinque setis reliquis longioribus munitis. Pedes-maarillares fusco-olivacei, bulbo rufulo; femore robusto versus basin incrassato; patella sat parva; tibia patella saltem dimidio longiore, latiore et ovata; tarso minuto, depressiusculo, sed apice abrupte angustiore, anguste recte et longe producto; bulbo subgloboso, spina lobo multo longiore tenuissima setiformi et recta.

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Se trouve aussi au Vénézuëla.

33. SCYTODES LINEATIPES, Tacz. (Plate XLII. figs. 16, 17.)

S. lineatipes, Taczanowski, Hor. Soc. ent. Ross. x. 1873, p. 107.

♀. Long. 4-4.5 mm.—Cephalothorax breviter ovatus, postice validissime gibbosus, sublaevis, parce et breviter nigro-pilosus, luridus, nigricanti-variatus: regione oculari in medio infuscata dein linea media exili abbreviata et utrinque lineis tribus, linea interiore subrecta leviter dentata et maculam frontalem attingente, linea intermedia antice abbreviata, postice convergente apiceque uncata, linea exteriori intermedia subsimili sed postice paulo magis producta extus dentata et ramulos abbreviatos 4 vel 5 emittente, vitta submarginali sat lata, valde flexuosa et dentata et inter vittam marginalem et lineas dorsales linea validissime sinuosa et plus minus punctata, postice, in declivitate, pone lineas dorsales exteriores, maculis parvis binis acute triquetris et lineis binis parallelis, leviter convexis et cariniformibus ornato. Margo clypei subrectus, sat angustus, ad angulos leviter convexus, haud productus. Oculi medii antici sat magni, rotundi et inter se juxta contigui, a margine clypei spatio diametro oculi saltem dimidio latiore sejuncti. Abdomen globosum, albo-testaceum, supra maculis nigris parvis inequalibus et dentatis fere inordinate conspersum et in parte basali linea longitudinali utrinque ramulos abbreviatos valde flexuosos gerente ornatum, subtus punctis nigris minoribus conspersum. Chelæ, sternum pedesque lutea, chelæ antice nigro-bivittate. Sternum utrinque vitta fusca latissima et confusa, spatii quatuor luteis notata, munitum. Pedes modice longi, graciles, femoribus subtus lineis nigris binis, in parte apicali plus minus interruptis et punctatis et antice punctis paucis seriatim ornatis, patellis apice minute nigro, tibiis annulo medio interrupto annuloque apicali integro notatis, metatarsis apicibus minutissime fuscis. Pedes-maarillares femore ad apicem patella tibiaque nigro-variatis.

♂. Long. 4 mm.—Femine subsimilis sed abdomine minore plerumque immaculato albedo, postice late et confuse infuscato, pedibus longioribus et gracilioribus. Pedes-maarillares breves; femore robusto et subrecto; patella parva curvata; tibia patella circiter $\frac{1}{2}$ longiore et multo latiore, subglobosa; tarso tibia et patella simul sumptis longiore apice anguste producto; bulbi lobo breviter

ovato, spina lobo multo longiore flexuosa, in medio leviter incrassata, apice parvulum compressa, truncata et minute penicillata.

Var. ♀. Spatium inter lineas dorsales interiores omnino infuscatum et vittam latam formans, sed spatium angustum et lineare inter lineas intermedium et anteriorem pallidius et litteram V albidam designans, partes laterales sæpe confuse fusco-reticulatæ, pictura sterni et abdominis pallidior.

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Se trouve aussi au Vénézuëla et en Guyane.

34. SCYTODES FUSCA, Walck.

Scytodes fusca, Walck. Apt. i. 1837, p. 272.

Scytodes guyanensis, Taczanowski, Hor. Soc. ent. Ross. x. 1873, p. 108.

♀. Long. 4 mm.—Cephalothorax breviter ovatus, postice valde gibbosus, subtilissime coriaceus et opacus, parce nigro-setosus, fusco-vel nigro-piceus, interdum concolor, sæpius lineis binis exilibus valde appropinquatis et rarius maculis marginalibus confusis obscure fulvo-rufulis ornatus. Margo clypei subrectus, utrinque leviter convexus, haud prominulus. Oculi medii antici sat magni subcontigui, a margine clypei spatio diametro oculi non multo latiore sejuncti. Abdomen subglobosum, nigrum, plerumque immaculatum, interdum vittis transversis sat latis flexuosis et in medio dentatis testaceis ornatum. Sternum nigro-piceum. Pedes mediocres, coxis, trochanteribus femoribusque fusco-piceis, reliquis articulis obscure fulvo-ravidis, rarius coxis testaceo-variatis et tibiis posticis subannulatis. Pedes maxillares breves et robusti, fusco-picei, patella apiceque tarsi dilutioribus.

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Se trouve aussi au Vénézuëla, en Guyane et au Brésil.

Gen. DRYMUSA, nov. gen.

Cephalothorax parum convexus, postice late truncatus, utrinque ample rotundus, antice sat abrupte attenuatus et fronte obtusa, stria thoracica parva tenui et remota. Oculi ut in Scytodi. Sternum late cordiforme, haud vel vix longius quam latum, antice haud attenuatum, latissime et recte sectum, postice attenuatum sed truncatum, et coxæ posticæ inter se late distantes. Pars labialis maxima, ad basin spatium intercoxale totum occupans, multo longior quam lata, sensim attenuata, apice leviter convexa submembranacea et leviter excisa. Pedes gracillimi et longissimi, mutici. Mamillæ ut in Scytodi, sed inferiores distinctius separatæ. Regio epigasteris feminae producta et apertura genitalis corneo-marginata.

Ab *Loxosceli* præsertim differt sterno latius cordiformi, antice late et recte truncato, postice attenuato sed truncato et coxis posticis inter se distantibus, parte labiali ad basin spatio intercoxale haud angustiore etc.

35. *DRYMUSA NUBILA*, sp. nov.

♀. Long. 4 mm.—*Cephalothorax* sublævis, pallide fusco-rufescens, parte cephalica lineolis exillimis quinque, media recta, lateralibus leviter sinuosis et antice oblique convergentibus et postice maculis binis magnis, elongatis, obliquis et contiguis, literam V magnam designantibus, notata, parte thoracica lineolis radiantibus vix expressis munita. Oculi subæquales, triangulum magnum occupantes. Clypeus oculis anticis plus triplo latior. Abdomen sat longe ovatum, nigrum, antice punctis duobus subgeminatis, dein lineis transversis tribus valde sinuosis et acute biangulosis ornatum, subtus regione epigasteris leviter convexa et rufescente. Sternum, chelæ, partes oris pedesque pallide fusco-rufescentia, sterno et parte labiali paulo obscurioribus, subtilissime coriaceis atque opacis, femoribus leviter infuscatis. Pedes parce et sat longe pilosi.

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5. Familia CAPONIIDÆ¹.

Gen. NOPS, MacLeay.

Cephalothorax ovatus, antice attenuatus et obtusus. Clypeus directus, oculis plus quadruplo latior. Oculi duo. Sternum planum, sat longe oblongum, antice posticeque attenuatum. Laminae maxillares ad apicem vix attenuatae atque obtusae. Pedes mediocres, robusti, patellis longis, quatuor anticis tibus $\frac{1}{3}$ tantum brevioribus, tarsis biarticulatis, articulo basali apicali longiore et versus basin attenuato, subappendiculato, metatarsis quatuor anticis carina membranacea et calcare apicali subtus insigniter instructis.

36. *NOPS COCCINEUS*, sp. nov. (Plate XLII. fig. 18.)

♀. Long. 8 mm.—9 mm.—*Cephalothorax* sat humilis, ovatus, antice attenuatus et obtusus, læte fusco-coccineus, crebre et uniformiter coriaceo-rugosus et opacus, macula oculari nigra et rotunda. Oculi duo sat magni, late ovati et subrotundi, spatio diametro oculi fere dimidio angustiore inter sese distantes. Clypeus directus, oculis plus quintuplo latior. Abdomen longe oblongum, pallide testaceo-virescens, vitta media lata, dentata, antice acuta et marginem anticum haud attingente et utrinque vitta marginali nigra lata supra ornatum, interdum vitta media confuse rufulo-limbata, subtus immaculatum. Mamillæ testaceae. Sternum fusco-coccineum, uniformiter et valde coriaceum. Chelæ fusco-rufulae, læves. Pedes læte rufo-coccinei, coxis anticis paulo obscurioribus, metatarsis tarsisque cunctis paulo dilutioribus, femoribus robustis compressis et, praesertim anticis, subclavatis. Pedes-maxillares fulvo-rufescentes; tibia patella saltem $\frac{1}{3}$ longiore, a basi ad apicem leviter ampliata; tarso tibia longiore et crassiore, leviter ovato, supra albido subtus nigricanti-crinito.

¹ Typus gen. *Caponia*, E. Sim. (= *Colophon*, Cambr., nom. præocc.).

♂. *Long.* 6–7 mm.—*Femine subsimilis sed pedibus longioribus. Pedes-maxillares fulvo-rufescentes; tibia patella saltem $\frac{1}{3}$ longiore, angusta et leviter curvata; tarso tibia et patella simul sumptis paulo longiore, sat anguste ovato, apice obtuso et nigro-crinito; bulbo maximo, globoso et depressiusculo, spina lobo brevior, antice valde arcuata, sat robusta, apice truncata et minutissime bifida.*

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“Windward side, May and June: under stones, shady places. Hill-sides about 500 feet. Near Chateaubelais, Aug. and Sept., forest not far from sea-level, concealed in withered vines; others in forests in various places near Chateaubelais (rare).”—H. H. S.

Gen. CAPONINA, nov. gen.

Cephalothorax sat late ovatus, antice parum attenuatus et obtusus. Clypeus subverticalis, oculis vix duplo latior. Oculi duo magni et subcontigui. Sternum convexum, latissime cordiforme, haud longius quam latum. Lamine maxillares ad apicem valde attenuate. Pedes mediocres, robusti, patellis sat parvis, cunctis subequalibus et tibiis multo brevioribus, tarsis uniaarticulatis, compressis et sat longis, quatuor anticis metatarsis non multo brevioribus, metatarsis anticis carina calcareque apicali carentibus.

37. CAPONINA TESTACEA, sp. nov.

♀. *Long.* 4 mm.—*Cephalothorax* lurido-testaceus, laevis et nitidus, macula oculari nigra magna notatus. Oculi magni, rotundi, inter se anguste separati. Clypeus obliquus, subverticalis, oculis haud duplo latior. Abdomen breviter ovatum, albido-testaceum, parce fulvo-pubescent et antice pilis nigris paucis longioribus munitum. Partes oris, sternum pedesque lurido-testacea, pedes, praesertim metatarsis et tarsis, sat longe cinereo-criniti. Chelae antice setis nigris longis paucis erectis munitae.

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6. Familia DRASSIDÆ.

Drassidæ, ad part.; subfamilia *Drassinæ*, E. Sim. Ar. Fr. iv.

Gen. SERGIOLUS, nov. gen.

Herpyllus, Hentz, Bost. J. Nat. Hist. 1847–1850 (ad part. *H. variegatus*).

Cephalothorax anguste oblongus, parum convexus, antice parum attenuatus et fronte sat lata, stria media thoracica carens. Oculi antici subcontigui, in lineam rectam vel subrectam dispositi, medii lateralibus majores. Oculi postici parvi æquidistantes vel sæpius medii inter se remotiores, in lineam rectam seu leviter recurvam, parum remotam et linea antica evidenter latiore ordinati. Area mediorum trapeziformis, non multo longior quam lata. Clypeus oculis anticis latior. Chelae mediocres, marginibus sulci

muticis. Pars labialis fere triplo longior quam lata, fere parallela apice obtusa. Lamine longæ, subrectæ, ad basin attenuatæ, extus ad apicem leviter dilatato-rotundæ. Sternum anguste oblongum, antice posticeque attenuatum. Pedes breves et robusti aculeati, metatarsis tarsisque anticis rare scopulatis.

Ab *Aphantaulaci*, cui affinis est, imprimis differt parte labiali multo longiore quam lata et oculorum linea antica recta.

Typus hujus generis est *Herpyllus variegatus*, Hentz.

38. SERGIOLUS ELEGANS, sp. nov.

♀. *Long. 4 mm.*—*Cephalothorax anguste oblongus, humilis, fulvo-rufescens, sat late fusco-marginatus, pilis longis, pronis albosericis vestitus. Oculi postici æqui, in lineam plane rectam ordinati, medii inter se quam a lateralibus remotiores et spatio inter medios et laterales diametrum oculi vix æquante. Oculi antici in lineam subrectam dispositi, medii lateralibus fere duplo majores, inter se anguste distantes, sed a lateralibus juxte contigui. Abdomen sat longe oblongum, depressiusculum, albedo-testaceum, niveo-pilosum, supra in parte prima maculis nigricantibus binis ovatis, in parte secunda maculis magnis binis subquadratis sæpe confluentibus et vittam transversam latam designantibus, et postice, supra mamillas, maculis binis minoribus elongatis et obliquis stricte decoratum, subtus immaculatum. Mamillæ fulvo-testaceæ. Partes oris fulvo-rufescentes. Sternum pedesque luridi, pedes breves et robusti, tibiis quatuor anticis inferne in parte apicali aculeis binis debilibus uniseriatis et metatarsis ad basin aculeis binis armatis, tibiis metatarsisque posticis numerose aculeatis, metatarsis tarsisque anticis crasse et rare scopulatis. Plaga vulvæ sat parva, rufula, obtusissime triquetra, utrinque leviter depressa et marginata.*

A *S. variegato*, Hentz, differt oculorum serie postica recta, pictura cephalothoracis et abdominis.

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7. Familia PALPIMANIDÆ.

39. OTIOTHOPS OBLONGUS, sp. nov.

♀. *Long. 6 mm.*—*Cephalothorax nigro-rufescens, tenuiter et crebre coriaceo-rugosus. Oculi medii postici parvi, plani, breviter ovati et obliqui, inter se spatio diametro oculi circiter duplo angustiore distantes. Oculi medii antici posticis saltem duplo majores, nigri, convexi et rotundi. Clypeus areæ mediorum circiter æquilatus. Abdomen oblongum, atro-testaceum, sericeo-pubescenti, plagula epigasteri rufula postice truncata, nitida sed transversim striolata, munitum. Sternum nigro-rufescens, uniformiter granosum. Chelæ parce rugosæ, extus subtiliter carinatæ. Pedes ut in *O. amazonico* et *lapidicola*, antici rufo-castanei, reliqui fulvo-aurantii.*

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Ab *O. lapidicola*, E. Sim., differt oculis mediis posticis minoribus

Fig 1.

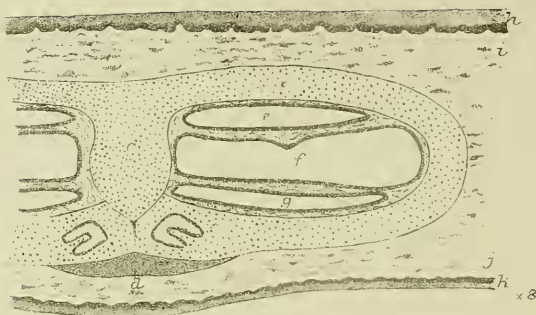


Fig 2.

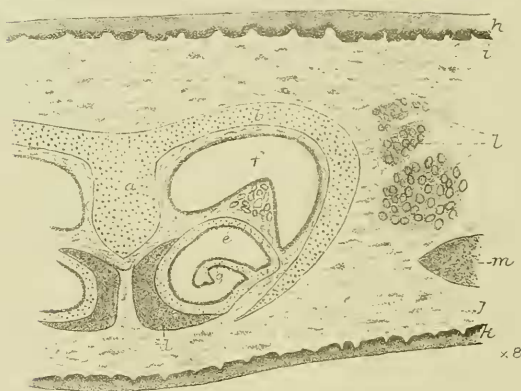


Fig 3.

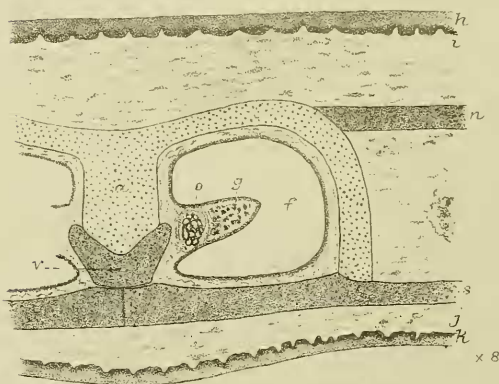
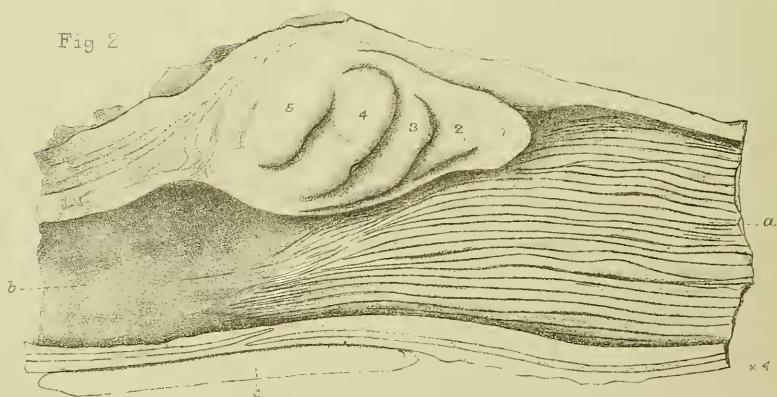


Fig 1



Fig 2



et inter se distinctius separatis, pedibus sex posticis aurantiis, haud luteis; ab *O. amazonico*, E. Sim., præsertim differt cephalothorace longiore et humiliore. Ab *O. walckenaeri*, M'Leay (sp. quæ mihi est ignota), verisimiliter distinctus est.

EXPLANATION OF PLATE XLII.

- Fig. 1. *Dysderina principalis*, p. 557. Lateral view of palp. of ♂.
 2. *Dysderina spinigera*, p. 558. Leg.
 3. ———. Palp. of ♂, lateral view.
 4. *Pelcinus narmoratus*, p. 559. Lateral view of palp. of ♂.
 5. *Opopea deserticola*, p. 560. Lateral view of palp. of ♂.
 6. *Oonops spinimanus*, p. 563. Lateral view of leg.
 7. *Oonops globimanus*, p. 563. Lateral view of palp. of ♂.
 8. *Oonops pulicarius*, p. 564. Lateral view of palp. of ♂.
 9. *Oonops figuratus*, p. 564. Abdomen from above.
 10. *Ochyrocera arietina*, p. 566. Lateral view of palp. of ♂.
 11. *Ochyrocera quinquevittata*, p. 566. Lateral view of palp. of ♂.
 12. *Theoclia radiata*, p. 567. Lateral view of palp. of ♂.
 13. *Scytodes longipes*, p. 567. Lateral view of palp. of ♂.
 14. *Scytodes hebraica*, p. 568. Cephalothorax from above.
 15. *Scytodes bajula*, p. 569. Lateral view of palp. of ♂.
 16, 17. *Scytodes linearipes*, p. 570. Cephalothorax from above.
 18. *Nops coccineus*, p. 572. Lateral view of palp. of ♂.

4. On the Nose, the Organ of Jacobson, and the Dumb-bell-shaped Bone in the Ornithorhynchus. By JOHNSON SYMINGTON, M.D., F.R.S.E., Lecturer on Anatomy, Minto House, Edinburgh¹. (Communicated by FRANK E. BEDDARD, M.A., F.Z.S.)

[Received November 5, 1891.]

(Plates XLIII. & XLIV.)

Notwithstanding the great amount of attention that has been devoted to the anatomy of the Ornithorhynchus since its discovery nearly a century ago, its nasal cavities appear to have been, to a large extent, overlooked.

Meckel (1), Owen (2), Albrecht (3), Turner (4), Zuckerkandl (5), and Parker (6) have examined and described certain portions of the nose, but no account of its microscopic structure appears to have hitherto been published, and several points in its naked-eye anatomy have been overlooked or misinterpreted.

The following communication is based upon the study of a series of coronal sections of the head of a nearly adult female, together with the examination of several dissected specimens and macerated skulls. The sections were cut after having been decalcified and embedded in paraffin. Most of the Ornithorhynchi which have reached this country have not been sufficiently well preserved to admit of their microscopic examination, and I am greatly indebted

¹ From the Embryological Laboratory, University of Edinburgh.

to one of my Australian pupils, Mr. C. Hardcastle, not only for procuring me the specimen, but also for the trouble he took to have it carefully hardened.

In consequence of the elongated form of the face, the position of the nostrils towards the anterior end of the beak, and the prolongation of the hard palate backwards nearly as far as the glenoid cavity, the nasal cavities are of considerable length. In my specimen, which measured 37 cm. from the tip of the bill to the posterior extremity of the tail, the nasal cavities were 6 cm. in length. Males are considerably larger than females, and Mr. Oldfield Thomas (7) found the basal length of the skull of an adult male, measured from the basion to the anterior end of the premaxillary bones, to be 10·8 cm. The nasal cavities are not, of course, equal to the basal length of the skull, but in this male they would be quite 8 cm.; while the nasal cavities are very long their transverse and vertical diameters are very slight, so as to make their naked-eye examination somewhat difficult. The anterior parts of the nasal cavities are flattened, like the bill, from above downwards, and here the transverse diameter is about 4·5 mm. and the vertical extent scarcely 2 mm. Farther back, under the cranial cavity, and especially in the region of the turbinated processes, the nasal cavities are much deeper, measuring from the roof to the floor 5 mm., while their transverse diameter is almost obliterated by the projection of the turbinals from the outer wall.

Vertical transverse sections of the nasal cavities immediately behind the nostrils show a subdivision of each cavity into 3 compartments—superior, middle, and inferior (see Plate XLIII. fig. 1). The two septa between these compartments are formed by the lining membrane of the nose, which is here composed of dense connective tissue, the matrix of which is only slightly fibrillated, and of stratified squamous epithelium. The septa are not supported by any skeletal framework, but contain a few small glands the ducts of which open into the middle compartment. Serial sections show that the septa commence anteriorly as horizontal ridges projecting from the sides of the partition between the two nostrils and unite with the outer walls of the nasal cavities just behind the two nostrils. In my sections the middle compartment is always larger than the others, but this difference becomes more obvious as one passes backwards, the superior and inferior compartments gradually becoming smaller and ultimately end blindly, while the middle one becomes continuous with the main cavity of the nose. The two cæcal pouches extend backwards to a little beyond the anterior end of Jacobson's organ and nearly as far as the naso-palatine foramen. Their length is about 3 mm., and the upper is a trifle longer than the lower.

J. F. Meckel is the only author who, so far as I have been able to ascertain, makes any reference to this peculiar arrangement. In plate vii. fig. 8 of his classical work on the *Ornithorhynchus* (1), he gives a view of the anterior part of the right nasal cavity with its three divisions. He exposed them by cutting through the outer wall of the nose and turning its roof over to the left side. Meckel

considers the septa already described to be valves, and he concludes that in the absence of any muscles for closing the nostrils such valves must be very useful to an animal with the aquatic habits of the Ornithorhynchus. Various aquatic mammals, such as the Seal, possess a powerful sphincter muscle for closing the nostrils when diving, but I know of no animal with a structure like that in the Ornithorhynchus. The function of these septa is very doubtful. They do not appear in my sections to be sufficiently large and free to meet one another so as to close the anterior part of the nose: further, it is obvious that were they to do so they would constitute a serious obstacle to inspiration of air through the nose.

The Organ of Jacobson.

Numerous papers have been published recently on the structure and relations of this organ in various mammals, but scarcely anything appears to be known with reference to its condition in the Ornithorhynchus. Indeed Sir W. Turner (4) and the late Professor W. K. Parker (6) seem to be the only anatomists who have given any account of the organ. Sir W. Turner, when investigating the relations of the naso-palatine foramen to the dumb-bell-shaped bone, ascertained that a bristle passed from the mouth into this foramen entered a cavity which extended backwards for some distance in relation to the nasal septum. Turner considered that this cavity with its walls formed the organ of Jacobson. On opening the nasal chamber he found that this organ formed a ridge projecting from the side of the nasal septum halfway across the cavity. Prof. Zuckerkandl (5) also recognized this ridge and figured it (see plate i. fig. 2 of his work), but he did not associate it with Jacobson's organ, and merely stated that it increases the mucous surface and diminishes the anterior part of the nasal cavity.

Professor Parker in his "Mammalian Descent" (the Hunterian Lectures for 1884) referred as follows to Jacobson's Organ:—"In my young specimen of Ornithorhynchus (the size of a moderate fist, with the hair appearing) these parts and their capsules are as large as in Serpents and Lizards," p. 52. He gave no further description of the organ in the Ornithorhynchus, but mentioned it as one of the Reptilian characters of the Prototheria.

We know from the researches of Jacobson, Gratiolet, Balogh, Klein, Herzfeld, Schwink, Kölliker, Gegenbaur, and others that Jacobson's organ exists in the great majority of mammals in which it has been looked for. Its structure, however, is comparatively rudimentary, especially in the higher Mammalia. Its existence in man is disputed, and even if present it is very feebly developed. It is absent in Birds, and until recently this was supposed to be the case also in the Crocodilia. Professor Howes (8) has, however, brought before this Society strong evidence of its existence in the *Caiman niger*. It is well known to exist in the Ophidia and Lacerilia, indeed it is in these groups that it is supposed to attain its maximum development. Its condition in the lower Mammals, and

especially in the Prototheria, is, therefore, a subject of considerable morphological interest.

My series of coronal sections pass through the entire organ, which fortunately was sufficiently well preserved to admit of a satisfactory microscopic examination.

As there is no distinct external nose and the anterior part of the nasal cavity is not complicated by the presence of turbinated processes, we should expect the cartilaginous framework of the nose of the Ornithorhynchus to be comparatively simple, and such will be found to be the case. Thus a coronal section through the nose about midway between the nostrils and Stenson's ducts shows a central bar of cartilage forming the nasal septum. This cartilage divides above into two lateral plates, each of which first curves outwards, then downwards, and lastly turns inwards to end, in close contact with the one of the opposite side, just below the nasal septum. It is in the somewhat thickened inner extremity of this lateral plate that the anterior part of Jacobson's organ is embedded (see (c) on fig. 1 of Plate XLIII.). A little farther back the cartilaginous floor of the nose is perforated by the naso-palatine foramen or Stenson's duct. This foramen passes from the mouth into the nose on the outer side of Jacobson's organ, while the cavity of the organ itself opens on the inner wall of the foramen. These relations of the naso-palatine foramen and the duct of Jacobson's organ are those which Herzfeld (9) found to exist in the majority of mammals. The piece of cartilage lying to the inner side of the naso-palatine foramen forms the cartilaginous framework of Jacobson's organ, and in all coronal sections, from the level of the foramen backwards to the posterior end of the organ, its cartilage is seen as an independent mass having no direct connection with either the nasal septum or the cartilage in the floor of the nose. We thus see that the cartilage of Jacobson's organ in this animal is continuous, in front of the naso-palatine foramen, with the cartilage in the floor of the nose, while behind this it appears in coronal sections as a separate structure. With the exception of the parts at the naso-palatine foramen and near its posterior extremity, the cartilage forms a complete investment for Jacobson's organ. At the naso-palatine foramen it is perforated for the passage of the duct from Jacobson's organ into the foramen, while posteriorly it is open for the passage into it of branches of the olfactory nerve and of glandular tissue. The cavity enclosed by the cartilaginous capsule is partially divided into two compartments by a bar of cartilage which passes from the outer side upwards and inwards towards the inner wall. This septum, which is continuous with the cartilaginous capsule, varies in its form at different levels. Thus in front of the naso-palatine foramen the septum is nearly straight (see fig. 1, Plate XLIII.), but behind the opening it is turbinated, curving downwards and inwards (see fig. 2, Plate XLIII.; and fig. 1, Plate XLIV.).

The cartilaginous framework of Jacobson's organ in the Ornithorhynchus will be found to differ considerably from that of any of the Eutheria in which it has been described. Thus in the Sheep

(10), Guinea-pig (11), Rabbit (12), and Dog (13) it forms a less complete capsule, and in no transverse vertical section is it seen in continuity with the cartilage in the outer wall of the nose. Further, in none of these animals is there any trace of a simple or turbinated septum which is so well developed in the Duck-mole. I am not aware of any published account of its condition in the Marsupialia, but in a young *Macropus giganteus* which I examined there were no indications of a turbinal, and the general form and position of the organ were very similar to that in the Guinea-pig as figured by Dr. Klein. Professor W. N. Parker (14) has recently shown that the *Echidna* possesses a largely developed Jacobson's organ which has a well-marked turbinal. So far, therefore, as our present knowledge goes, it appears that it is only in the Prototheria amongst mammals that any arrangement of the cartilage of Jacobson's organ exists by which the extent of the epithelial surface lining the organ is increased. In various mammals the cartilage of Jacobson's organ attains a large size, while the lumen of the organ is of microscopic size. This is probably an indication that the sensory part of the organ has degenerated more rapidly than its cartilaginous support.

In the Lacertilia and Ophidia the skeletal framework of Jacobson's organ contains a turbinal, and it is in these animals that the organ is generally considered to attain its highest development. Thus Dr. J. Beard (15) writes as follows:—"Indeed an examination of the literature of Jacobson's organ clearly shows that just in the group of animals, the Reptilia, in which alone it can be considered as something more than a rudimentary organ, a thorough comparative investigation is a desideratum" (p. 757).

I am inclined to believe that this statement of Dr. Beard will require modification, and that further research will show that Jacobson's organ attains its highest development in the Prototheria. My own observations amongst the Reptilia are limited to its examination in *Anguis fragilis* and *Pelias berus*, in neither of which does it appear to me to be so well developed as in the Ornithorhynchus.

The arrangement of the structures forming the soft parts of Jacobson's organ are shown in fig. 1, Pl. XLIII., which represents a transverse section behind the naso-palatine foramen and about the middle of the posterior swelling of the dumb-bell-shaped bone. It will be seen that there is a very marked difference in the structure of the soft parts lining the general cartilaginous capsule (*a*) and that covering the turbinated ridge (*b*). The turbinal cartilage is covered by some connective tissue, external to this is a thick layer composed mainly of blood-vessels and glandular tissue, while the free surface is provided with a layer of ciliated columnar epithelium. On the other hand, the structures lying on the concave surface of the cartilaginous capsule are evidently nervous. Next the cartilage are numerous small bundles of non-medullated nerve-fibres, which are separated from the sensory cells by a thin layer of connective tissue. In my specimen this sensory layer contains a large number of oval or rounded cells with distinct nuclei, but there are no

columnar epithelial cells next the free surface such as are generally found. It is possible that these have been detached.

In the Guinea-pig, Dog, and Rabbit Dr. Klein found the organ of Jacobson to be flattened from side to side with the outer wall pushed slightly inwards, so that on transverse vertical section the organ was kidney-shaped. The outer wall was covered with ciliated columnar epithelium, while the inner wall possessed, in addition to ordinary columnar cells, special sensory cells. The outer wall of the organ in these mammals evidently corresponds to that covering the turbinated process in the *Ornithorhynchus*, while the inner wall is represented by the structures lining the general cartilaginous capsule.

In all mammals so far as at present investigated, except the Monotremes, the cavity of Jacobson's organ communicates anteriorly with the nasal chamber or with Stenson's duct, and this opening is anterior to the cavity of the organ. We have already seen that this is not the case in the *Ornithorhynchus*, where the cavity extends forwards as well as backwards from its opening into Stenson's duct. In Lizards the duct from Jacobson's organ passes backwards and downwards to open into the cavity of the mouth.

The cavity of the organ of Jacobson in the *Ornithorhynchus* is about 5 to 6 mm. in length. Both extremities end blindly, the posterior one just in front of the hinder end of the dumb-bell-shaped bone.

The ridge on the inner wall of the nose caused by Jacobson's organ is prolonged backwards nearly 3 cm. beyond the termination of the organ proper. The ridge here consists of glandular tissue and bundles of olfactory nerve-fibres, the nerves being internal to the glandular tissue (see fig. 3, Plate XLIII.).

The nasal cavity is lined by stratified squamous epithelium until near the posterior end of Jacobson's organ, where it becomes gradually replaced by columnar epithelium.

A transverse vertical section of the nose (see fig. 3, Plate XLIII.) about 1.5 cm. behind the nostrils shows that the walls of the nose are still mainly cartilaginous; the floor, however, contains the palatine process of the superior maxillary bone, and the lower part of the nasal septum the vomer.

The Dumb-bell-shaped Bone.

Since 1879, when Professor Albrecht (3*a*) published his first paper dealing with the ossification of the inter-maxillary bone, there has been a vigorous controversy as to whether this bone is normally developed in man and the higher mammals from one or two centres. The embryological evidence in favour of two centres appears to me to be unsatisfactory, the careful observations of T. Kölliker (16) and Schwink (17) being strongly in favour of its formation from a single centre.

Albrecht's (3) views as to the morphology of the dumb-bell-shaped bone in the *Ornithorhynchus* have, however, been pretty generally accepted. He directed attention to the fact, previously noticed by Rudolphi, Meckel (1), and Owen (2), and since confirmed

by Turner (4), that in this animal the premaxillary bone consists of two entirely distinct and separate portions, an outer and an inner. Of these two the inner unites with its fellow of the opposite side to form a small dumb-bell-shaped bone, *l'os paradoxo* of Albrecht. As the Ornithorhynchus is the only mammal in which this arrangement of the premaxillary bone exists, it appeared to me that its position and relations were worthy of a more detailed examination than they have yet received. J. F. Meckel and Owen have described its general form when looked at from below, while Albrecht and Turner have shown its relations to the naso-palatine foramen. I propose now to demonstrate from my serial sections its relations to the cartilages of the nose and to Jacobson's organ.

When looked at from below, this bone is seen to consist of two rounded nodules placed one in front of the other and united by a narrow portion. Of the two nodules, the anterior is the smaller. The naso-palatine foramen lies just external to the constricted portion. Its total length in the adult is about 7 mm., and the breadth of the posterior swelling 5 mm.

The anterior nodule does not reach quite so far forward as the nostrils, but extends a little beyond the anterior end of Jacobson's organ. On transverse section (see fig. 1, Pl. XLIII.) it is seen to form a thin layer of bone, flattened from above downwards. It is separated from the cavity of the mouth by the mucous membrane of the hard palate and some loose connective tissue, while its upper surface lies in close relation to the cartilages of the nose which contain Jacobson's organ. As it passes backwards it gets thicker and develops a median ridge on its upper surface, which passes upwards between the two plates of cartilage containing Jacobson's organ. Opposite the naso-palatine foramen its vertical extent is about twice that of its transverse, and its external surfaces are concave and lodge the inner part of the cartilage of Jacobson's organ.

A section through about the middle of the posterior nodule of the bone shows that it possesses the same general form as at the naso-palatine foramen. It appears here as composed of two crescents with their convexities directed inwards, and the greater breadth of the bone is due to the elongation of the horns of the crescents, which reach about halfway round the organ of Jacobson and are in close contact with its cartilage.

In the greater part of its extent the bone is covered on its oral aspect by mucous membrane and a thin layer of submucous tissue, but near its posterior extremity also by a layer of cartilage. This is effected by an extension inwards to the middle line of the plates of cartilage which at the naso-palatine foramina lie external to these openings.

The dumb-bell-shaped bone from its position in relation to the cartilages of the nose is evidently ossified in the membrane investing them. In some places the ossific process has involved the whole of the tissue up to the cartilage, so that the bone and cartilage are in direct contact; as a rule, however, there is a thin layer of connective tissue between the bone and cartilage.

The relation of the bone to the organ of Jacobson corresponds essentially to that of the palatine process of the premaxilla in various mammals.

Turbinated Processes.

The only author who appears to make any reference to these processes is Prof. Zuckerkandl (5). In fig. 1 of plate i. of his work he gives a drawing of the external wall of the left nasal cavity as exposed by a sagittal section immediately to the left of the septum nasi. For the sake of comparison, I divided the posterior part of the nose in my specimen in a similar manner. The right part, consisting of the right nasal cavity and septum nasi, was divided in a transverse vertical direction and the sections mounted for microscopic examination, while the outer wall of the left nasal cavity was preserved for naked-eye examination.

The result of my investigations differs considerably from those of Professor Zuckerkandl; and I think it extremely probable from the drawing he gives that his specimen had been partially macerated or at least imperfectly preserved. Zuckerkandl divides the turbinated processes into a "Nasenmuschel" (maxillo-turbinal) and three "Reichwülste" (ethmo-turbinals). The former he describes as belonging to the group of "gefalteten Nasenmuscheln" (p. 10). These are turbinals which show on their free surface some longitudinal grooves.

I am satisfied that the maxillo-turbinal constitutes a well-marked example of the branching variety (verästigte Muschel) such as is found in the common Seal. Transverse sections show that the turbinal springs from the outer wall and that its branches almost entirely fill the corresponding part of the nasal cavity, reaching close to the nasal septum. The turbinal is pretty well ossified, but the smaller branches are often tipped with cartilage. Unfortunately in my specimen the spirit had not penetrated properly into this part of the nose, so that the character of the mucous membrane covering them could not be properly determined. In a well-macerated skull kindly lent me by A. Wilson, Esq., L.D.S. (Edin.), the branches of this turbinal can be easily recognized. The maxillo-turbinal extends backwards so as to lie partly below the ethmo-turbinals, but it is separated from the latter by a well-marked groove.

The ethmo-turbinals (Reichwülste) are described by Zuckerkandl as three in number. The majority of Osmatic mammals have five, and I think this number can be distinguished in the Ornithorhynchus (see fig. 2, Plate XLIV.).

The olfactory bulbs and ethmo-turbinals are present, but only moderately well-developed in this animal; it therefore belongs to the group named by Sir W. Turner (4*a*) Microsmatic.

The soft palate was about 1 cm. in length, and the epiglottis projected upwards behind it. In another adult specimen in my possession I found a similar intra-narial position of the epiglottis.